Supreme Court, U.S.
FILED
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No. 03-388

IN THE

Supreme Court of the United States

DENNIS BATES, *ET AL.*,

Petitioners,

v.

DOW AGROSCIENCES LLC,

Respondent.

On Writ of Certiorari to the United States Court of Appeals for the Fifth Circuit

JOINT APPENDIX

DEAN T. BARNHARD
BARNES & THORNBURG
11 South Meridian Street
Indianapolis, Indiana 46204
(317) 236-1313

Counsel of Record for Respondent

DAVID C. FREDERICK*
SCOTT K. ATTAWAY
KELLOGG, HUBER, HANSEN, TODD & EVANS, P.L.L.C.
1615 M Street, N.W.
Suite 400
Washington, D.C. 20036
(202) 326-7900

**Counsel of Record for Petitioners*

September 13, 2004

(Additional Counsel Listed On Inside Cover)

PETITION FOR A WRIT OF CERTIORARI FILED: SEPTEMBER 9, 2003
CERTIORARI GRANTED: JUNE 28, 2004

JOSEPH R. ALBERTS
DOW AGROSCIENCES LLC
9330 Zionsville Road
Building 308-1B
Indianapolis, Indiana 46268
(317) 337-4837

Counsel for Respondent

PHIL WATKINS
BETH W. SQUIRES
PHIL WATKINS, P.C.
700 North St. Mary's Street
Suite 1750
San Antonio, Texas 78205
(210) 225-6666

KIMBERLY S. KELLER
THE KELLER GROUP
14302 Ben Brush Lane
San Antonio, Texas 78248
(210) 857-5267

Counsel for Petitioners

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS (LUBBOCK)

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5:01-CV-00331
	)	
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

CIVIL DOCKET

Filing Date	#	Docket Text
12/21/2001	1	COMPLAINT FOR DECLARATORY RELIEF filed; Filing Fee $150.00 Receipt # 37724 (dws) (Entered: 12/21/2001)
		* * * * *
01/22/2002	5	ORIGINAL ANSWER to Complaint by defendant Dennis Bates, [*et al.*] (Attorney Phil Watkins) (ebl) (Entered: 01/22/2002)
		* * * * *
01/29/2002	33	MOTION by defendant Dennis Bates, [*et al.*] to dismiss plaintiff 's suite [*sic*] for lack of jurisdiction (ebl) (Entered: 01/29/2002)

01/29/2002	34	MEMORANDUM by defendant Dennis Bates, [*et al.*] in support of [33-1] motion to dismiss plaintiff 's suite [*sic*] for lack of jurisdiction (ebl) (Entered: 01/29/2002)

* * * * *

02/14/2002	37	RESPONSE by plaintiff Dow Agrosciences LLC to [33-1] motion to dismiss plaintiff 's suit for lack of jurisdiction (ebl) (Entered: 02/15/2002)
02/14/2002	38	APPENDIX by plaintiff Dow Agrosciences LLC in support of [37-1] motion response (ebl) (Entered: 02/15/2002)
03/12/2002	39	ORDER denying [33-1] motion to dismiss plaintiff 's suit for lack of jurisdiction, improper venue and lack of subject matter jurisdiction. Defendants' Motion to Dismiss Plaintiff 's suit under the Court's discretionary authority to abstain is DENIED. All relief not expressly granted in [*sic*] DENIED. (Signed by Judge Sam R. Cummings) Copies to counsel: 3/12/2002 Page(s) 10 (ebl) (Entered: 03/12/2002)
03/13/2002	40	MOTION by plaintiff Dow Agrosciences LLC for summary judgment on principles of federal pre-emption and the uniform commercial code (ebl) (Entered: 03/13/2002)

03/13/2002	41	MEMORANDUM by plaintiff Dow Agrosciences LLC in support of [40-1] motion for summary judgment (ebl) (Entered: 03/13/2002)
03/13/2002	42	APPENDIX by plaintiff Dow Agrosciences LLC in support of [40-1] motion for summary judgment (ebl) (Entered: 03/13/2002)

* * * * *

03/27/2002	45	UNOPPPOSED MOTION by defendant Dennis Bates, [*et al.*] for leave to file Counterclaims (ebl) (Entered: 03/27/2002)
03/27/2002	46	MEMORANDUM by defendant Dennis Bates, [*et al.*] in support of [45-1] motion for leave to file Counterclaims (ebl) (Entered: 03/27/2002)
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04/02/2002	49	RESPONSE (MEMORANDUM) by defendant Dennis Bates, [*et al.*] in opposition to [40-1] motion for summary judgment (ebl) (Entered: 04/02/2002)
04/02/2002	50	APPENDIX by defendant Dennis Bates, [*et al.*] in support of [49-1] opposition response (ebl) (Entered: 04/02/2002)

* * * * *

04/04/2002	52	ADDENDUM TO DEFENDANTS' MEMORANDUM IN OPPOSITION TO PLAINTIFF'S MOTION FOR SUMMARY JUDGMENT by defendant Dennis Bates, [*et al.*] (ebl) (Entered: 04/04/2002)
04/11/2002	53	MOTION by defendant Dennis Bates, [*et al.*] to amend [48-1] counter claim (ebl) (Entered: 04/11/2002)
04/15/2002	54	MOTION with memorandum in support by plaintiff Dow Agrosciences LLC to amend, join parties, and extend deadline to join additional party (ebl) (Entered: 04/15/2002)
04/15/2002	55	APPENDIX by plaintiff Dow Agrosciences LLC in support of [54-1] motion to amend, join parties, and extend deadline to join additional party (ebl) (Entered: 04/15/2002)
04/17/2002	56	REPLY BRIEF by plaintiff Dow Agrosciences LLC to response to [40-1] motion for summary judgment (ebl) (Entered: 04/17/2002)
04/19/2002	57	AMENDED REPLY by plaintiff Dow Agrosciences LLC to response to [40-1] motion for summary judgment (ebl) (Entered: 04/19/2002)
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04/25/2002	59	RESPONSE to [54-1] motion to amend, join parties, and extend deadline to join additional party by Robert Tracy Griffiths, Sand Farms, Inc., Comanche Horizon Corporation, and Sheila Gruben (ebl) (Entered: 04/25/2002)
04/25/2002	60	APPENDIX in support of [59-1] motion response (ebl) (Entered: 04/25/2002)
05/01/2002	61	RESPONSE by plaintiff Dow Agrosciences LLC to [53-1] motion to amend [48-1] counter claim (ebl) (Entered 05/01/2002)
05/10/2002	62	REPLY by plaintiff Dow Agrosciences LLC to response to [54-1] motion to amend, join parties, and extend deadline to join additional party, brief in support, and request for expedited ruling (ebl) (Entered: 05/10/2002)
05/10/2002	63	APPENDIX by plaintiff by Dow Agrosciences LLC in support of [62-1] response reply (ebl) (Entered: 05/10/2002)
06/03/2002	64	ORDER granting [40-1] motion for summary judgment (SEE ORDER FOR FURTHER INFORMATION) (Signed by Judge Sam R. Cummings) Copies to counsel: 6/3/02 Page(s) 9 (ebl) (Entered: 06/03/2002)

06/03/2002	65	JUDGMENT; the court declares that the Defendants' available remedies, if any, are limited to those set forth in the Limitations of Remedies section of the federally approved Strongarm label; the Warranty Disclaimer section of the federally approved Strongarm label is valid and enforceable; and the Plaintiff's and the Defendants' rights and obligations are governed by the federally approved Strongarm label and any claims directly or indirectly attacking that federally approved label, and/or the EPA-approved composition of Strongarm, are expressly and impliedly preempted by the Federal Insecticide, fungicide and Rodenticide Act, 7 USC 136 et seq. (Signed by Judge Sam R. Cummings) Copies to counsel: 6/3/02 Page(s): 1 (ebl) (Entered: 06/03/2002)
06/03/2002		Case closed (ebl) (Entered: 06/03/2002)
06/14/2002	66	MOTION by defendants for reconsideration of [65-1] judgment order (klw) Modified on 06/14/2002 (Entered: 06/14/2002)
06/14/2002	67	MEMORANDUM by defendants in support of [66-1] motion for reconsideration of [65-1] judgment order (klw) Modified on 06/14/2002 (Entered: 06/14/2002)

06/14/2002	68	APPENDIX by defendants in support of [66-1] motion for reconsideration of [65-1] judgment order (klw) (Entered: 06/14/2002)
06/17/2002	69	MOTION with memorandum in support by plaintiff Dow Agrosciences LLC to alter or amend [65-1] judgment order, and motion for expedited review (ebl) (Entered: 06/17/2002)
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06/25/2002	71	RESPONSE by defendant Dennis Bates, [*et al.*] to [69-1] motion to alter or amend [65-1] judgment order (ebl) (Entered: 06/25/2002)
06/25/2002	72	APPENDIX by defendant Dennis Bates, [*et al.*] in support of [71-1] motion response (ebl) (Entered: 06/25/2002)
06/25/2002	73	ORDER denying [69-1] motion to alter or amend [65-1] judgment order (Signed by Judge Sam R. Cummings) Copies to counsel: 6/25/02 Page(s) 1 (ebl) (Entered 06/25/2002)
07/05/2002	74	RESPONSE by plaintiff Dow Agrosciences LLC to [66-1] motion for reconsideration of [65-1] judgment order (bdg) UNFILED PER ORDER SIGNED 07/31/03 DOCUMENT # 75. Modified on 7/31/2003 (bdg,). (Entered: 07/05/2002)

07/05/2002	75	APPENDIX by plaintiff Dow Agrosciences LLC in support of [74-1] motion response (bdg) (Entered: 07/05/2002)
07/08/2002	76	ORDER denying [66-1] motion for reconsideration of [65-1] judgment order (Signed by Judge Sam R. Cummings) Copies to counsel: 7/8/02 Page(s) 2 (egb) (Entered: 07/08/2002)

* * * * *

08/06/2002	78	NOTICE OF APPEAL by defendant Dennis Bates, [*et al.*] re [76-1] order, [65-1] judgment order, [64-1] order, [39-1] order (bdg) (Entered: 08/07/2002)
08/07/2002		Notice of appeal and certified copy of docket to USCA: [78-1] appeal (bdg) (Entered: 08/07/2002)

* * * * *

08/15/2002	Transmitted record on appeal to U.S. Court of Appeals: [78-1] appeal; Consisting of six (6) volumes of record (bdg) (Entered: 08/15/2002)
08/28/2002	USCA Case Number, 02-10908 Re: [78-1] appeal (bdg) (Entered: 08/28/2002)

* * * * *

UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff-Appellee,	)	
	)	
v.	)	No. 02-10908
	)	
DENNIS BATES, [*et al.*],	)	
	)	
Defendants-Appellants.	)	

DOCKET ENTRIES

8/16/02	Private civil diversity case docketed. NOA filed by Appellants Dennis Bates, Jimmy Burson, Benny Judah, Tommy Coleman, Richard Cox, Et Al. [02-10908] (cnf)

* * * * *

8/21/02	Record on appeal filed. Vol(s) of Pleadings: 6. [02-10908] (jca)

* * * * *

10/23/02	Appellant's Brief filed by Appellant Dennis Bates, [*et al.*] Copies of brief: 7 # of pages: 61. Word count: 13,966 Disk Provided [Y/N]: y Date of COS: 10/22/02 Sufficient [Y/N]: y. [02-10908] A/Pet's Brief ddl satisfied. E/Res's Brief due on 11/22/02 for Dow Agrosciences LLC. (rsm)
10/23/02	Record excerpts filed by Appellant Dennis Bates, [*et al.*] # of copies: 4 Sufficient [Y/N]: y [02-10908] (rsm)

* * * * *

11/25/02 Appellee's Brief filed by Appellee Dow Agrosciences LLC. Copies of Brief: 7 # of pages: 63. Word count: 13,919 Disk Provided [Y/N]: y Date of COS: 11/22/02 Sufficient [Y/N]: y. [02-10908] E/Res's Brief ddl satisfied. Reply Brief due on 12/9/02 for Dennis Bates, [*et al.*]. (tws)

* * * * *

12/11/02 Reply brief filed by Appellant Dennis Bates, [*et al.*] Copies of Brief: 7 # of pages: 29. Word count: 6,905 Disk Provided [Y/N]: y Date of COS: 12/9/02 Sufficient [Y/N]: y. [02-10908] Reply Brief ddl satisfied. (rsm)

12/23/02 Supplemental authorities (FRAP 28(j)) filed by Appellee Dow Agrosciences LLC [4052438-1]. [02-10908] (rff)

* * * * *

03/12/03 Unopposed motion filed by Burk Denman to be dismissed as appellant [4124803-1] Date of COS: 3/11/03 Sufficient [Y/N]: y [02-10908] (rff)

03/12/03 Letter referencing unopposed motion to dismiss Burk Denman as appellant [4124803-1] filed by Appellee Dow Agrosciences LLC [4124825-1] [02-10908] (rff)

3/19/03 CLERK Order filed granting unopposed motion for partial dismissal of appeal [4124803-1] Involvement terminated for party Burk Denman. Copies to all counsel. [02-10908] (trm)

4/9/03 Supplemental authorities (FRAP 28(j)) filed by Appellant Dennis Bates, [*et al.*] [4154459-1] [02-10908] (pft)

4/10/03 Oral argument heard. Case argued by Sharon E Callaway for Appellant Dennis Bates, [*et al.*], Dean T Barnhard for Appellee Dow Agrosciences LLC [02-10908] (pft)

6/3/03 Supplemental authorities (FRAP 28(j)) filed by Appellee Dow Agrosciences LLC [4209226-1] [02-10908] (rff)

6/11/03 Opinion filed. If Published # of pages: 9 Issue Mandate due on 7/2/03. [02-10908] (kgc)

6/11/03 Judgment entered and filed. [02-10908] (kgc)

6/24/03 Motion filed by Appellant Dennis Bates, [*et al.*] to stay the mandate [4230077-1] Response/ Opposition due on 7/7/03. Date of COS: 6/23/03 Sufficient [Y/N]: y [02-10908] (rff)

* * * * *

7/23/03 COURT Order filed denying appellants' motion to stay mandate [4230077-1] (PEH) Copies to all counsel. [02-10908] (trm)

7/23/03 Mandate issued. Approved BOC Issued (Y/N)?: y [02-10908] Mandate pull date satisfied. (jca)

* * * * *

9/17/03 Supreme Court notice that petition for certiorari was filed on 09/09/03 by Appellant Dennis Bates, [*et al.*] Supct No.: 03-388 [02-10908 (lgl)

6/28/04 Supreme Court order received granting petition certiorari [4890776-1] by Appellant Dennis Bates, [*et al.*] on 6/28/04. [02-10908] (lgl)

7/19/04 Certified record on appeal transmitted to United States Supreme Court. 5th Cir. Vols: 1 DCt. Vols: 15 Supplemental Vols: 1 [02-10908] (trm)

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

[Filed Dec. 21, 2001]

COMPLAINT FOR DECLARATORY RELIEF

Dow AgroSciences LLC ("Dow AgroSciences"), by its attorneys, hereby brings this action for declaratory relief and alleges as follows:

JURISDICTION AND VENUE

1. This is a civil action over which this Court has original federal subject matter jurisdiction pursuant to 28 U.S.C. § 1332 (a)(1). There is complete diversity of citizenship between the parties and the matter in controversy exceeds the sum or value of seventy-five thousand ($75,000), exclusive of interest or costs, with respect to each individual Defendant.

2. Venue in this district is proper pursuant to 28 U.S.C. § 1391(a)(1) in that the majority of the defendants reside in this judicial district in the State of Texas and all defendants reside in the State of Texas.

3. Venue in this district is proper pursuant to 28 U.S.C. § 1391(a)(2) because a substantial part of the events or omissions giving rise to the claims herein

occurred in this district and because a substantial part of the property that is the subject matter of this action is situated in this district.

4. This Court also has supplemental jurisdiction over the dispute between Dow AgroSciences and the defendants pursuant to 28 U.S.C. § 1367(a) in that the defendants' claims are part of the same case or controversy as those of the other defendants and arise from the same central core of operative facts.

5. This Court has personal jurisdiction over each defendant pursuant to 2 Tex. Civ. Prac. & Rem. Code Ann. § 17.042.

PARTIES

6. Dow AgroSciences is a Delaware limited liability company with its principal place of business in Marion County, Indiana. Dow AgroSciences LLC was originally created as DowElanco, an Indiana general partnership, on October 31, 1989. DowElanco converted to a limited liability company on July 1, 1997 (DowElanco LLC) and changed its name to Dow AgroSciences effective January 1, 1998. Dow AgroSciences is a citizen of both Delaware and Indiana as provided by 28 U.S.C. § 1332(c)(1).

7. Defendants are a group of individual peanut crop growers who are citizens of the state of Texas residing in Baylor, Brisco, Brown, Collingsworth, Dawson, Eastland, Stephens, Erath, Fisher, Gaines, Hall, Hamilton, Haskell, Lamb, and Yoakum counties ("Defendants").

DECLARATORY JUDGMENT

8. This case involves an actual controversy, within the jurisdiction of this Court, and a judicial declaration is necessary regarding the rights and other legal relations between the plaintiff Dow AgroSciences and the Defendants, as set out below. Therefore, the relief

requested by Dow AgroSciences is specifically authorized by 28 U.S.C. §§ 2201 and 2202 and Fed. R. Civ. P. 57.

STATEMENT OF FACTS

9. Dow AgroSciences is, among other things, a manufacturer of pest management and biotechnology products. In the Spring of 2000, Dow AgroSciences introduced a new product, Strongarm*, which was used as a preemergence herbicide to control certain weeds in peanuts. Strongarm was introduced in the Southwest of the United States, including within this district.

10. The active ingredient in Strongarm is diclosulam.

11. Strongarm is registered with the United States Environmental Protection Agency pursuant to the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. §§ 136-136y. As part of the initial registration process under FIFRA for the Strongarm herbicide, Dow AgroSciences submitted all scientific data and information required by the EPA. The EPA determined that the data submitted by Dow AgroSciences to the EPA in support of the initial registration of Strongarm herbicide was in compliance with the requirements of FIFRA and registered Strongarm and assigned the registration number 62719-288 on March 8, 2000.

12. As part of the initial registration process for the Strongarm herbicide, Dow AgroSciences received from the EPA a stamped and accepted product label.

13. At all times relevant hereto, Dow AgroSciences has sold the Strongarm herbicide with labels that were accepted by the EPA and affixed to the product at the time of the sale.

---

* Trademark of Dow AgroSciences LLC.

14. The growing season in the Southwest in 2000 was challenging. Yields from peanut crops in Texas and Oklahoma were significantly lower than in previous years due to a severe mid-season drought and late-season rain and snow, which made harvest difficult. Water quality and quantity, as well as other cultural management practices, were also questionable.

15. Upon information and belief, near the end of 2000 counsel for various peanut growers were openly soliciting clients for a mass suit against Dow AgroSciences based on the allegation that the lower-than expected yields from peanut crops in Texas and Oklahoma were caused by and attributable solely to the individual growers' use of Strongarm.

16. Seventy-five individual peanut grower's represented by counsel have sent claim demand letters to Dow AgroSciences. Seventy are named as defendants in this action and in an action filed concurrently with this one in the United States District Court for the Western District of Oklahoma, collectively. Each of the individual Defendants' claims exceeds the $75,000 amount in controversy for purposes of jurisdiction pursuant to 28 U.S.C. § 1332 which includes specific demands for consequential and incidental damages, treble damages, and attorneys' fees and expenses. Combined, their claim demands excluding expenses and attorneys' fees total approximately $40,000,000.

17. The Defendants' contend that Strongarm was "highly toxic" and failed to control weeds in their peanut crops. The Defendants also contend that Dow AgroSciences misrepresented the product as being "of a particular standard, quality, and grade" and that these misrepresentations constituted false, misleading and deceptive acts and practices. Further, the Defendants allege false advertising, breach of warranty and statutory claims for alleged deceptive and fraudulent trade

practices. The Defendants have demanded payment from Dow AgroSciences for certain damages, including consequential and incidental damages, treble damages and attorneys' fees and expenses.

18. The federally-approved Strongarm label sets forth "Terms and Conditions of Use," "Warranty Disclaimer," "Inherent Risks," and "Limitations of Remedies."

19. Dow AgroSciences contends that upon the individual Defendants' purchase, retention and use of Strongarm, contracts between the individual Defendants and Dow AgroSciences were created, with the text of the federally-approved Strongarm label supplying the terms of those contracts and defining the parties' respective rights and liabilities.

20. Due to the nature of the claims made against Dow AgroSciences, it is clear that the individual Defendants refuse to acknowledge the existence of such contracts and that they further refuse to acknowledge that the text of the federally-approved Strongarm label defines the parties' respective rights, obligations and liabilities upon Strongarm's failure to perform as Defendants claim they expected.

21. The Terms and Conditions of Use section provides that the purchaser should return the unopened package of Strongarm at once for a full refund if the Warranty Disclaimer, Inherent Risks of Use, and Limitations of Remedies are unacceptable to the purchaser. The Terms and Conditions also provide that use of the product constitutes acceptance of the terms of the label.

22. The Warranty Disclaimer provides "that th[e] product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label . . . . The Disclaimer also provides: "Dow AgroSciences makes NO OTHER EXPRESS OR IMPLIED WARRANTY OR

IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY."

23. The Inherent Risks of Use section provides that risks such as crop injury are assumed by the buyer where abnormal conditions, e.g., drought, exist.

24. The Limitation of Remedies section provides as follows:

> The exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:
>
> 1. Refund of purchase price paid by buyer or user for product bought, or
>
> 2. Replacement of amount of product used.
>
> Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential damages or incidental damages or losses.
>
> The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer of this Limitation of Remedies in any manner.

25. A controversy exists between Dow AgroSciences and the Defendants regarding the enforceability of these provisions on the federally-approved Strongarm label and the viability of Defendants' claims against Dow AgroSciences.

COUNT I

26. Dow AgroSciences incorporates by reference paragraphs 1 through 25 of its Complaint as if fully set forth herein.

27. Affixed to each container of Strongarm purchased by Defendants was a federally-approved label which contained a "Limitation of Remedies."

28. A limitation of remedies provision, such as the one included on the Strongarm label, is valid and enforceable pursuant to Tex. Bus. & Com. Code Ann. § 2.719.

29. Defendants have asserted a right to recover damages from Dow AgroSciences in an amount which exceeds that permitted by the Limitation of Remedies section in the federally-approved Strongarm label.

30. A justiciable controversy exists between Dow AgroSciences and Defendants regarding the rights and other legal relations of the parties with respect to the remedies available to the Defendants such that a declaration is necessary pursuant to 28 U.S.C. §§ 2201 and 2202.

31. Dow AgroSciences is entitled to a declaration that Defendants' available remedies, if any, are limited to those set forth in the Limitation of Remedies section of the federally-approved Strongarm label.

COUNT II

32. Dow AgroSciences incorporates by reference paragraphs 1 through 31 of its Complaint as if fully set forth herein.

33. Affixed to each container of Strongarm purchased by Defendants was a federally-approved label which contained a "Warranty Disclaimer."

34. A provision, such as the one included on the federally-approved Strongarm label, disclaiming express or implied warranties is valid and enforceable pursuant to Tex. Bus. & Com. Code Ann.§ 2.316.

35. Defendants have asserted a right to bring claims for breach of express and implied warranties against Dow AgroSciences.

36. A justiciable controversy exists between Dow AgroSciences and Defendants regarding the rights and other legal relations of the parties with respect to the enforceability of the Warranty Disclaimer such that a declaration is necessary pursuant to 28 U.S.C. §§ 2201 and 2202.

37. Dow AgroSciences is entitled to a declaration that the Warranty Disclaimer section of the label is valid and enforceable.

COUNT III

38. Dow AgroSciences incorporates by reference the allegations contained in paragraphs 1 - 37.

39. Under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§ 136-136y, all herbicides sold or distributed in the United States must be registered with the Administrator of the Environmental Protection Agency. The EPA also regulates both the design and content of the label for a registered herbicide. The final printed labeling for a herbicide must be submitted and accepted by the Administrator before registration, and it is unlawful to sell an unregistered herbicide.

40. In determining the rights and legal relations of Dow AgroSciences and Defendants under the contract terms contained in the federally-approved Strongarm product label, this Court will be required to examine principles of federal preemption, which originate from the Supremacy Clause of the United States Constitution (U.S.

Const., Art. VI, cl. 2), and issues of federal law and congressional intent, which originate from FIFRA.

41. The responsibility of the EPA to regulate the labeling and registration of herbicide products is inherently federal in character, and the availability of state law remedies with respect to unexpected consequences of use of a federally registered herbicide are governed by and limited by federal law.

42. Defendants have challenged the adequacy and sufficiency of Dow AgroSciences's federally-approved Strongarm product label by alleging claims for damages against Dow AgroSciences under theories of fraud, false advertising, misrepresentation, negligence in design, testing and marketing, breach of express and implied warranty and statutory claims for alleged deceptive and fraudulent trade practices.

43. At all times relevant hereto, Dow AgroSciences has sold the Strongarm herbicide with labels that were accepted by the EPA and affixed to the product at the time of the sale.

44. FIFRA contains an express preemption clause that provides that a state "shall not impose or continue in effect any requirements for labeling and packaging in addition to or different from those required under [FIFRA]." 7 U.S.C. § 136v(b). This provision expressly preempts plaintiffs' direct and indirect challenges to the adequacy and sufficiency of any EPA-approved herbicide labeling or packaging.

45. Defendants' claims are also impliedly preempted by federal law because they (1) conflict with FIFRA's regulatory scheme and (2) directly conflict with the express authority given to registrants – such as Dow AgroSciences – to "distribute or sell a registered product with the composition, packaging and labeling currently approved by the Agency." 40 C.F.R. § 152.130(a).

46. A justiciable controversy exists between Dow AgroSciences and Defendants regarding the rights and other legal relations of the parties with respect to federal preemption of the Defendants' claims such that a declaration is necessary pursuant to 28 U.S.C. §§ 2201 and 2202.

PRAYER FOR RELIEF

For the foregoing reasons, Dow AgroSciences respectfully requests that the Court:

1. Declare that the Defendants' available remedies, if any, are limited to those set forth in the Limitation of Remedies section of the federally-approved Strongarm label; and

2. Declare that the Warranty Disclaimer section of the federally-approved Strongarm label is valid and enforceable;

3. Declare that the Plaintiffs and the Defendants' rights and obligations are governed by the federally-approved Strongarm label and any claims directly or indirectly attacking that federally-approved label, and/or the EPA approved composition of Strongarm, are expressly and implied preempted by federal statute and all regulations promulgated thereunder; and

4. Award any other relief that the Court deems just and proper.

JURY DEMAND

Plaintiff Dow AgroSciences LLC respectfully demands a jury trial on all claims and issues.

Dated: December 21, 2001

Respectfully submitted,

THOMPSON & KNIGHT L.L.P.

By: /s/ Frank L. Hill, by
Fernando M. Bustos (by permission)
Frank L. Hill
State Bar No. 09631500
98 San Jacinto Boulevard,
Suite 1200
Austin, Texas 78701-4081
Telephone: (512) 469-6100
Fax: (512) 469-6180

McCLESKEY, HARRIGER, BRAZILL & GRAF, L.L.P.
Fernando M. Bustos
Texas Bar No. 24001819
P. O. Box 6170
Lubbock, Texas 79493
Telephone: (806) 780-3976
Fax: (806) 796-7365

ATTORNEYS FOR PLAINTIFFS
DOW AGROSCIENCES LLC

Of Counsel:
BARNES & THORNBURG
Dean T. Barnhard
Joseph G. Eaton
11 South Meridian St.
Indianapolis, Indiana 46204
Telephone: (317) 236-1313
Fax: (317) 231-7433

ATTORNEYS FOR PLAINTIFF
DOW AGROSCIENCES LLC

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

[Filed Jan. 22, 2002]

DEFENDANTS' ORIGINAL ANSWER

TO THE HONORABLE JUDGE OF SAID COURT:

Defendants Dennis Bates, Jimmy Burson, Benny Judah, d/b/a Clearwater Farms, Tommy Coleman, Richard Cox, Wayne Davis, Burk Denman, Neil Friessen, Jake Forese, Thomas Fuston, Arthur Galvan, d/b/a G-5 Partnership, Greg Hughes, Sandra and Karl Don Hughes, d/b/a JH Cattle Co., Rudy Klassen, Ronnie Love, Kevin Mathis, Brad Palmer, Kirk Parrish, d/b/a K-L Farms, Jerry Parrish, Joevelyn Patterson and Donald Gruben, Stacey Price, Benny Judah, d/b/a Progressive Farms, Morris Rushing, d/b/a Pea-Dot Farms, Billy Shannon, Floyd Stokes, Craig West, Frenchie Lee Wheeler file this Original Answer to Plaintiff's Complaint for Declaratory Relief.

ADMISSIONS AND DENIALS

1. Defendants deny the allegations in Paragraph 1.
2. Defendants deny the allegations in Paragraph 2.
3. Defendants deny the allegations in Paragraph 3.

4. Defendants deny the allegations in Paragraph 4.
5. Defendants deny the allegations in Paragraph 5.
6. Defendants are without knowledge or information sufficient to form a belief as to the truth of the allegation in Paragraph 6.
7. Defendants deny the allegations in Paragraph 7.
8. Defendants deny the allegations in Paragraph 8.
9. Defendants admit the allegations in Paragraph 9.
10. Defendants admit the allegations in Paragraph 10.
11. Defendants are without knowledge or information sufficient to form a belief as to the truth of the allegation in Paragraph 11.
12. Defendants are without knowledge or information sufficient to form a belief as to the truth of the allegation in Paragraph 12.
13. Defendants are without knowledge or information sufficient to form a belief as to the truth of the allegation in Paragraph 13.
14. Defendants deny the allegation in Paragraph 14.
15 Defendants deny the allegation in Paragraph 15.
16. Defendants deny the allegations in Paragraph 16.
17. Defendants admit the allegations in Paragraph 17.
18. Defendants are without knowledge or information sufficient to form a belief as to the truth of the allegation in Paragraph 18.
19. Defendants are without knowledge or information sufficient to form a belief as to the truth of the allegation in Paragraph 19.
20. Defendants admit the allegations in Paragraph 20.
21. Defendants deny the allegations in Paragraph 21.

22. Defendants admit the allegations in Paragraph 22.

23. Defendants admit the allegations in Paragraph 23.

24. Defendants admit the allegations in Paragraph 24.

25. Defendants admit that a controversy exists between Dow Agrosciences and Defendants regarding the enforceability of the warranty disclaimer and limitation of remedies but denies the remaining allegations in Paragraph 25.

26. Defendants admit the allegations in Paragraph 26.

27. Defendants deny the allegations in Paragraph 27.

28. Defendants deny the allegations in Paragraph 28.

29. Defendants admit that they have asserted a right to recover damages against Dow Agrosciences. Defendants deny the remaining allegations in Paragraph 29.

30. Defendants deny the allegations in Paragraph 30.

31. Defendants deny the allegations in Paragraph 31.

32. Defendants admit the allegations in Paragraph 32.

33. Defendants deny the allegations in Paragraph 33.

34. Defendants deny the allegations in Paragraph 34.

35. Defendants admit the allegations in Paragraph 35.

36. Defendants deny the allegations in Paragraph 36.

37. Defendants deny the allegations in Paragraph 37.

38. Defendants admit the allegations in Paragraph 38.

39. Defendants are without knowledge or information sufficient to form a belief as to the truth of the allegation in Paragraph 39.

40. Defendants deny the allegations in Paragraph 40.

41. Defendants admit the allegations in Paragraph 41.

42. Defendants admit the allegations in Paragraph 42.

43. Defendants are without knowledge or information sufficient to form a belief as to the truth of the allegation in Paragraph 43.

44. Defendants deny the allegations in Paragraph 44.

45. Defendants deny the allegations in Paragraph 45.

46. Defendants deny the allegations in Paragraph 46.

Plaintiff has sued Defendants Tommy Coleman, Burk Denman, and Floyd Stokes in the wrong capacity because each Defendant does not have the capacity to defend as an individual.

AFFIRMATIVE DEFENSES

Even if Plaintiff proves the allegations in its complaint, by its conduct Plaintiff is estopped to deny liability to the Defendants; is estopped to deny the Limitation of Remedies provision in its label and has waived the Warranty Disclaimer and Limitation of Remedies provision in its label. The Plaintiff, by and through its representatives, fraudulently induced the Defendants to use Strongarm in their peanut fields in the year 2000 growing season and further represented to the Defendants that if they would grow their peanut crop to maturity the delay in growth due to stunting would resolve itself and would result in a normal crop and, if it did not, Dow Agrosciences would pay each Defendant for their crop losses including all incidental and consequential losses.

PRAYER

For each of the above and foregoing reasons, Defendants ask the court to render judgment that the Plaintiff take nothing and dismiss Plaintiff's suit with prejudice, award costs against Plaintiff and award Defendants their reasonable and necessary attorneys' fees,

costs and expenses together with such other and further relief to which each Defendant is justly entitled, either at law or in equity.

Respectfully submitted,

PHIL WATKINS, P.C.

One Riverwalk Place, Suite 1750
700 N. St. Mary's Street
San Antonio, Texas 78205
Telephone: (210) 225-6666
Telecopier: (210) 225-2300

BY: /s/ Phil Watkins
PHIL WATKINS
State Bar No. 20927400

ATTORNEYS FOR DEFENDANT

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

[Filed Feb. 14, 2002]

PLAINTIFF DOW AGROSCIENCES LLC'S RESPONSE TO DEFENDANTS' MOTION TO DISMISS AND BRIEF IN SUPPORT

Respectfully submitted:

Frank L. Hill
State Bar No. 09631500
Thompson & Knight
1200 San Jacinto Center
98 San Jacinto Boulevard
Austin, TX 78701-4081
Phone: (512) 496-6100
Fax: (512) 496-6180
Attorney for Plaintiff

Fernando M. Bustos
State Bar No. 24001819
McCleskey, Harriger, Brazill & Graf, LLP
PNB Financial Building
5010 University Avenue
P.O. Box 6170
Lubbock, Texas 79493
Telephone: (806) 796-7300
Telecopier: (806) 796-7365
Attorney for Plaintiff

[Text Omitted, Exhibits Excerpted]

* * * * *

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF JOSEPH R. ALBERTS

STATE OF INDIANA §
COUNTY OF MARION §

BEFORE ME, the undersigned authority, on this day personally appeared JOSEPH R. ALBERTS, who, being by me duly sworn on his oath, deposed as follows:

"My name is Joseph R. Alberts. I reside in Hamilton County, Indiana. I work in Marion County, Indiana. I am over the age of 18, of sound mind, have never been convicted of any crime involving moral turpitude, and have personal knowledge of the following facts. I am fully competent to make this Affidavit.

I am a Senior Litigation Attorney for Dow AgroSciences LLC. I am employed as an attorney by and for Dow AgroSciences LLC. The documents included in pages 003 through 166 of the Appendix to Plaintiff Dow AgroSciences LLC's Response to Defendants' Motion to Dismiss are true and correct copies of letters that I received from Phil Watkins, attorney for Defendants in

this case. Pages 003 through 166 of Plaintiff's Appendix are incorporated by reference within this Affidavit."

Further, Affiant sayeth not.

/s/ Joseph R. Alberts
DATED: February 12, 2002 JOSPEH R. ALBERTS

[Notary Omitted]

[LETTERS OMITTED]

WATKINS, CICHOWSKI & GONZALEZ, P.C.

[Letterhead Names/Address Omitted]

[Stamp Omitted]

October 30, 2001

Mr. Joseph R. Alberts
Senior Litigation Counsel
Law Department
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268-1054

Via CM-RRR # 7001 0360 0003 6428 0077

RE: *Strongarm* Herbicide*

Dear Mr. Alberts:

As you know this law firm has been retained to represent Mr. Burke Denman, with respect to the claim he has against Dow Agrosciences, LLC, concerning his purchase and use of Strongarm*.

Mr. Denman purchased the Strongarm* from his local retailer in the Spring of 2000. The Strongarm* was represented by Dow as having the characteristics and ingredients of a good herbicide when in fact the product was highly toxic which caused damage to Mr. Denman's peanuts and continues to cause damage to his land. In addition, the Strongarm* was represented by the Dow representative as being of a particular standard, quality, and grade when in fact it did not have any of these qualities.

My client's complaint is that the conduct of Dow AgroSciences constitutes false, misleading and deceptive acts and practices in violation of §17.46(b)(5) and (7) of the Texas Deceptive Trade Practices-Consumer Protection Act.

Based upon the information now available to us and for the purpose of this notice letter, we estimate Mr.

Denman's damage is at least $37,992.50 for his 59.30 acres of peanuts he had in production in 2000. Attached hereto are Mr. Denman's documents verifying his damages.

Mr. Denman reserves the right to adjust the amounts of his damages to conform to the information and additional evidence that may be available at a later date. He believes that the above damage claims are correct, to the best of his information and belief.

In addition, Mr. Denman has incurred reasonable and necessary attorney fees and expenses in the pursuit of his claims as stated in this letter. The amount of attorney fees and expenses incurred as of the date of this letter are at least $10,000.00. This amount will increase as time passes.

The purpose of this letter is to encourage Dow AgroSciences to resolve Mr. Denman's claims in a fair and equitable manner without the need of further expense. In the event Dow fails to take advantage of this settlement offer, we will have no other alternative but to recommend to our client that a lawsuit be filed and prosecuted to its conclusion under the Texas Deceptive Trade Practices-Consumer Protection Act.

If you are interested in resolving this matter, please contact me in writing within (60) sixty days of your receipt of this letter.

Very truly yours,

WATKINS, ClCHOWSKI &
GONZALEZ, P.C.
/s/ Michael Miller
Michael Miller

MM:mgr
cc:
Mr. Burke Denman

[LETTERS OMITTED]

WATKINS, CICHOWSKI & GONZALEZ, P.C.

[Letterhead Names/Address Omitted]

[Stamp Omitted]

September 27, 2001

Mr. Joseph R. Alberts
Senior Litigation Counsel
Law Department
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268-1054

Via CM-RRR # 7001 0360 0003 6428 0312

RE: *Strongarm* Herbicide*

Dear Mr. Alberts:

As you know this law firm has been retained to represent Mr. Dennis Bates, with respect to the claim he has against Dow AgroSciences, LLC, concerning his purchase and use of Strongarm*.

Mr. Bates purchased the Strongarm* from his local retailer in the Spring of 2000. The Strongarm* was represented by Dow as having the characteristics and ingredients of a good herbicide when in fact the product was highly toxic which caused damage to Mr. Bates' peanuts and continues to cause damage to his land. In addition, the Strongarm* was represented by the Dow representative as being of a particular standard, quality, and grade when in fact it did not have any of these qualities.

My client's complaint is that the conduct of Dow AgroSciences constitutes false, misleading and deceptive acts and practices in violation of §17.46(b)(5) and (7) of the Texas Deceptive Trade Practices-Consumer Protection Act.

Based upon the information now available to us and for the purpose of this notice letter, we estimate Mr. Bates'

damage is at least $100,327.50 for his 67 acres of peanuts he had in production in 2000. Attached hereto are Mr. Bates' documents verifying his damages.

Mr. Bates reserves the right to adjust the amounts of his damages to conform to the information and additional evidence that may be available at a later date. He believes that the above damage claims are correct, to the best of his information and belief.

In addition, Mr. Bates has incurred reasonable and necessary attorney fees and expenses in the pursuit of his claims as stated in this letter. The amount of attorney fees and expenses incurred as of the date of this letter are at least $10,000.00. This amount will increase as time passes.

The purpose of this letter is to encourage Dow AgroSciences to resolve Mr. Bates' claims in a fair and equitable manner without the need of further expense. In the event Dow fails to take advantage of this settlement offer, we will have no other alternative but to recommend to our client that a lawsuit be filed and prosecuted to its conclusion under the Texas Deceptive Trade Practices-Consumer Protection Act.

If you are interested in resolving this matter, please contact me in writing within (60) sixty days of your receipt of this letter.

Very truly yours,

WATKINS, CICHOWSKI & GONZALEZ, P.C.

/s/ Michael Miller
Michael Miller

MM:mgr
cc:
Mr. Dennis Bates

WATKINS, CICHOWSKI & GONZALEZ, P.C.

[Letterhead Names/Address Omitted]

[Stamp Omitted]

September 20, 2001

Mr. Joseph R. Alberts
Senior Litigation Counsel
Law Department
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268-1054

Via CM-RRR # 7001 0360 0003 6428 0336

RE: *Strongarm* Herbicide*

Dear Mr. Alberts:

As you know this law firm has been retained to represent Mr. Jimmy Burson, with respect to the claim he has against Dow AgroSciences, LLC, concerning his purchase and use of Strongarm*.

Mr. Burson purchased the Strongarm* from his local retailer in the Spring of 2000. The Strongarm* was represented by Dow as having the characteristics and ingredients of a good herbicide when in fact the product was highly toxic which caused damage to Mr. Burson's peanuts and continues to cause damage to his land. In addition, the Strongarm* was represented by the Dow representative as being of a particular standard, quality, and grade when in fact it did not have any of these qualities.

My client's complaint is that the conduct of Dow AgroSciences constitutes false, misleading and deceptive acts and practices in violation of §17.46 (b)(5) and (7) of the Texas Deceptive Trade Practices-Consumer Protection Act.

Based upon the information now available to us and for the purpose of this notice letter, we estimate Mr.

Burson's damage is at least $67,620.00 for his 65 acres of peanuts he had in production in 2000. Attached hereto are Mr. Burson's documents verifying his damages.

Mr. Burson reserves the right to adjust the amounts of his damages to conform to the information and additional evidence that may be available at a later date. He believes that the above damage claims are correct, to the best of his information and belief.

In addition, Mr. Burson has incurred reasonable and necessary attorney fees and expenses in the pursuit of his claims as stated in this letter. The amount of attorney fees and expenses incurred as of the date of this letter are at least $10,000.00. This amount will increase as time passes.

The purpose of this letter is to encourage Dow AgroSciences to resolve Mr. Burson's claims in a fair and equitable manner without the need of further expense. In the event Dow fails to take advantage of this settlement offer, we will have no other alternative but to recommend to our client that a lawsuit be filed and prosecuted to its conclusion under the Texas Deceptive Trade Practices-Consumer Protection Act.

If you are interested in resolving this matter, please contact me in writing within (60) sixty days of your receipt of this letter.

Very truly yours,

WATIKINS, CICHOWSKI & GONZALEZ, P.C.

/s/ Michael Miller
Michael Miller

MM:mgr
cc:
Mr. Jimmy Burson

[LETTERS OMITTED]

APPENDIX

Summary of Motion to Dismiss Defendants' Residence by County And Federal Judicial District

Defendants' establish the county of residence for each Defendant, in their Motion to Dismiss. Their argument, in relevant part, reads:

a. Defendant Dennis Bates resides in Brown County, Texas situated in the San Angelo ~~Division of~~ the **Northern District of Texas**.

b. Jimmy Burson resides in Haskell County, Texas situated in the Abilene Division of the **Northern District of Texas**.

c. Benny Judah, d/b/a Clearwater Farms resides in Lubbock County, Texas [which is within the **Northern District of Texas**].

d. Tommy Coleman is not a proper party but resides in Collingsworth County, Texas situated in the Amarillo Division of the **Northern District of Texas**.

e. Richard Cox resides in Baylor County, Texas situated in the Wichita Falls Division of the **Northern District of Texas**.

f. Wayne Davis resides in Yoakum County, Texas [which is within the **Northern District of Texas**].

g. Burk Denman is not a proper party as he is deceased. The personal representative of his estate resides in Comanche County, Texas situated in the Fort Worth Division of the **Northern District of Texas**.

h. Neil Friessen resides in Gaines County, Texas [which is within the **Northern District of Texas**].

i. Jake Forese resides in Gaines County, Texas [which is within the **Northern District of Texas**].

j. Thomas Fuston resides in Hall County, Texas situated in the Amarillo Division of the **Northern District of Texas**.

k. Arthur Galvan, d/b/a G-5 Partnership, resides in Yoakum County, Texas [which is within the **Northern District of Texas**].

l. Greg Hughes resides in Gaines County, Texas [which is within the **Northern District of Texas**].

m. Sandra and Karl Don Hughes, d/b/a JH Cattle Co., reside in Gaines County, Texas [which is within the **Northern District of Texas**].

n. Rudy Klassen resides in Gaines County, Texas [which is within the **Northern District of Texas**].

o. Ronnie Love resides in Eastland County, Texas situated in the Abilene Division of the **Northern District of Texas**.

p. Kevin Mathis resides in Haskell County, Texas situated in the Abilene Division of the **Northern District of Texas**.

q. Brad Palmer resides in Yoakum County, Texas [which is within the **Northern District of Texas**].

r. Kirk Parrish, d/b/a K-L Farms, resides in Yoakum County, Texas [which is within the **Northern District of Texas**].

s. Jerry Parrish resides in Yoakum County, Texas [which is within the **Northern District of Texas**].

t. JoEvelyn Patterson resides in Haskell County, Texas situated in the Abilene Division of the **Northern District of Texas**.

u. Donald Gruben resides in Haskell County, Texas situated in the Abilene Division of the **Northern District of Texas**.

v. Stacey Price resides in Hall County, Texas situated in the Amarillo Division of the **Northern District of Texas**.

w. Benny Judah, d/b/a Progressive Farms, resides in Lubbock County, Texas [which is within the **Northern District of Texas**].

x. Morris Rushing, d/b/a/ Pea-Cot Farms, resides in Yoakum County, Texas [which is within the **Northern District of Texas**].

y. Billy Shannon resides in Hall County, Texas situated in the Amarillo Division of the **Northern District of Texas.**

z. Floyd Stokes is not a proper party but, resides in Erath County, Texas situated in the Forth Worth Division of the **Northern District of Texas**.

aa. Craig West resides in Lamb County, Texas [which is within the **Northern District of Texas**].

bb. Frenchie Lee Wheeler resides in Brown County, Texas situated in the San Angelo Division of the **Northern District of Texas**.

Motion to Dismiss at 4-7.

Appendix

Summary of demands made by Defendants (the letters by which these demands were transmitted are included, *supra*, in this Appendix)

- Dennis Bates: $100,327.50
  Letter dated 9/27/01.
- Jimmy Burson: $67,620.00; "In addition, Mr. Burson has incurred reasonable and necessary attorney fees . . . [of] at least $10,000.00."

Thus, the total for Mr. Burson's claims exceed $77,620.00.
Letter dated 9/20/01.

- Clearwater Farms: $385,397.50
  (Benny Judah)
  Letter dated 9/20/01.
- Tommy Coleman: $301,217.50
  Letter dated 10/04/01.
- Wayne Davis: $267,267.50
  Letter dated 9/20/01.
- Neil Freissen: $444,810.00
  Letter dated 10/30/01.
- Jake Forese: $530,080.00
  Letter dated 9/27/01.
- Thomas Fuston: $584,290.00
  Letter dated 10/04/01.
- G-5 Partnership: $320,080.00
  (Arthur Galvan)
  Letter dated 9/20/01.
- Arthur Galvan: $613,247.50
  Letter dated 9/20/01.

- Greg Hughes: $177,570.00
  Letter dated 9/25/01.
- JH Cattle Co. $485,702.50
  (Sandra and
  Karl Don Hughes)
  Letter dated 9/25/01.
- Rudy Klassen: $95,135.00
  Letter dated 10/04/01.
- Ronnie Love: $395,142.50
  Letter dated 9/07/01.
- Kevin Mathis: $203,245.00
  Letter dated 10/30/01.
- Brad Palmer: $182,005.00
  Letter dated 8/28/01.
- K-L Farms: $145,062.50
  (Kirk Parrish)
  Letter dated 9/25/01.
- Jerry Parrish: $267,155.00
  Letter dated 9/25/01.
- JoEvelyn Patterson: $182,750.00
  (& Donald Gruben)
  Letter dated 9/20/01.
- Stacy Price: $278,730.00
  Letter dated 10/30/01.
- Progressive Farms: $328,832.50
  (Benny Judah)
  Letter dated 9/20/01.
- Pea-Cot Farms: $314,335.00
  (Morris Rushing)
  Letter dated 11/16/01.
- Billy Shannon: $215,132.50
  Letter dated 10/30/01.

- Floyd Stokes: $19,775,000.00
  Letter dated 9/04/01.

- Craig West: $125,035.00
  Letter dated 10/30/01.

The remaining three Defendants made the following claims:

- Frenchie Lee Wheeler: $18,242.50; "In addition, Mr. Wheeler has incurred reasonable and necessary attorney fees and expenses in the pursuit of his claims as stated in this letter. The amount of attorneys fees and expenses incurred as of the date of this letter are at least $10,000.00. This amount will increase as time passes. The purpose of this letter is to encourage Dow AgroSciences to resolve Mr. Cox's claims in a fair and equitable manner without the need of further expense. In the event Dow fails to take advantage of this settlement offer, we will have no other alternative but to recommend to our client that a lawsuit be filed and prosecuted to its conclusion under the Texas Deceptive Trade Practices-Consumer Protection Act."

Letter dated 9/27/01. Of course, the Defendants' DTPA claim contemplates treble damages as provided by that statute. *E.g., Love v. Dow AgroSciences*, Plaintiff's Original Petition, Count X(f); Tex. Bus. & Com. Code §17.50(b)(1)(Vernon 2000). Such trebling constitutes part of the amount in controversy. *Villegas*, 242 F.3d at 284; *Fairmont Travel*, 75 F. Supp. 2d at 668. Thus, the total for this Defendant is $84,727.50.

- Richard Cox: $33,227.50; "In addition, Mr. Cox has incurred reasonable and necessary

attorney fees and expenses in the pursuit of his claims as stated in this letter. The amount of attorneys fees and expenses incurred as of the date of this letter are at least $10,000.00. This amount will increase as time passes. The purpose of this letter is to encourage Dow AgroSciences to resolve Mr. Cox's claims in a fair and equitable manner without the need of further expense. In the event Dow fails to take advantage of this settlement offer, we will have no other alternative but to recommend to our client that a lawsuit be filed and prosecuted to its conclusion under the Texas Deceptive Trade Practices-Consumer Protection Act."

Letter dated 9/04/01. Of course, the DTPA claim contemplates treble damages as provided by that statute. *E.g., Love v. Dow AgroSciences*, Plaintiff's Original Petition, Count X(f); Tex. Bus. & Com. Code Ann. § 17.50(b)(1)(Vernon 2000). Such trebling constitutes part of the amount in controversy. *Villegas*, 242 F.3d at 284; *Fairmont Travel*, 75 F. Supp. 2d at 668. Thus, the total for this Defendant is $129.682.50.

- Burk Denman: $37,992.50; "In addition, Mr. Denman has incurred reasonable and necessary attorney fees and expenses in the pursuit of his claims as stated in this letter. The amount of attorneys fees and expenses incurred as of the date of this letter are at least $10,000.00. This amount will increase as time passes. The purpose of this letter is to encourage Dow AgroSciences to resolve Mr. Cox's claims in a fair and equitable manner without the need of

> further expense. In the event Dow fails to take advantage of this settlement offer, we will have no other alternative but to recommend to our client that a lawsuit be filed and prosecuted to its conclusion under the Texas Deceptive Trade Practices-Consumer Protection Act."

Letter dated 10/30/01. Of course, the DTPA claim contemplates treble damages as provided by that statute. *Eg., Love v. Dow AgroSciences*, Plaintiff's Original Petition, Count X(f); Tex. Bus. & Com. Code Ann. §17.50(b)(1)(Vernon 2000). Such trebling constitutes part of the amount in controversy. *Villegas*, 242 F.3d at 284; *Fairmont Travel*, 75 F. Supp. 2d at 668. Thus, the total for this Defendant is $129,682.50.

---

[1] Even if the Fifth Circuit did not recognize punitive damages as appropriately included in a determination of the amount in controversy, the appropriate remedy would be to dismiss only those three individual defendants, and not as to the remaining twenty-two.

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

[Stamp omitted]

DOW AGROSCIENCES, LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No.
	)	5:01-CV-331-C
DENNIS BATES, *et al.*,	)	
	)	
Defendants.	)	

[Filed Mar. 12, 2002]

ORDER

On this day the Court considered Defendants' Motion to Dismiss for Lack of Subject Matter Jurisdiction, Improper Venue, and Failure to State a Claim filed January 29, 2002. Plaintiff filed a Response to Defendant's Motion to Dismiss on February 14, 2002. No Reply was filed. After considering all relevant arguments and evidence, the Court **DENIES** Defendants' Motions to Dismiss.

I.

BACKGROUND

Plaintiff, Dow AgroSciences, manufactures pest management and biotechnology products. Plaintiff introduced Strongarm in the spring of 2000. Strongarm is used as a preemergence herbicide to control certain weeds in peanuts. Plaintiff began receiving demand letters from individual peanut growers (Defendants) contending that

Strongarm was "highly toxic" and failed to control the weeds in their peanut crops. The Defendants also contended that Plaintiff misrepresented the product and that the misrepresentations constituted false, misleading, and deceptive acts and practices. In addition, Defendants alleged false advertising, breach of warranty, and statutory claims for alleged deceptive and fraudulent trade practices. Defendants' demand letters demanded payment from Plaintiff for certain damages, including consequential and incidental damages, treble damages, and attorneys' fees and expenses. On December 21, 2001, Plaintiff brought suit seeking declaratory judgment.

II.

STANDARD

Rule 12(b)(1) Subject Matter Jurisdiction

Motions filed under Rule 12(b)(1) of the Federal Rules of Civil Procedure allow a party to challenge the subject matter jurisdiction of the district court to hear a case. FED. R. CIV. P. 12(b)(1). Lack of subject matter jurisdiction may be found in any one of three instances: (1) the complaint alone; (2) the complaint supplemented by undisputed facts evidenced in the record; or (3) the complaint supplemented by undisputed facts plus the court's resolution of disputed facts. *Barrera-Montenegro v. United States*, 74 F.3d 657, 659 (5th Cir. 1996).

The burden of proof for a Rule 12(b)(1) motion to dismiss is on the party asserting jurisdiction. *McDaniel v. United States*, 899 F. Supp. 305, 307 (E.D. Tex. 1995). Accordingly, the plaintiff constantly bears the burden of proof that jurisdiction does in fact exist. *Menchaca v. Chrysler Credit Corp.*, 613 F.2d 507, 511 (5th Cir. 1980).

When a Rule 12(b)(1) motion is filed in conjunction with other Rule 12 motions, the court should consider the Rule 12(b)(1) jurisdictional attack before addressing any

attack on the merits. *Hitt v. City of Pasadena*, 561 F.2d 606, 608 (5th Cir. 1977) (per curiam). This requirement prevents a court without jurisdiction from prematurely dismissing a case with prejudice. *Id.* The court's dismissal of a plaintiff's case because the court lacks subject matter jurisdiction is not a determination on the merits and does not prevent the plaintiff from pursuing a claim in a court that does have proper jurisdiction. *Id.*

In examining a Rule 12(b)(1) motion, the district court is empowered to consider matters of fact which may be in dispute. *Williamson v. Tucker*, 645 F.2d 404, 413 (1981). Ultimately, a motion to dismiss for lack of subject matter jurisdiction should be granted only if it appears certain that the plaintiff cannot prove any set of facts in support of his claim that would entitle plaintiff to relief. *Home Builders Ass'n of Miss., Inc. v. City of Madison, Miss.*, 143 F.3d 1006, 1010 (5th Cir. 1998).

Rule 12(b)(3) Improper Venue

Motions under Federal Rule of Civil Procedure 12(b)(3) are used to raise the defense of improper venue, which challenges the plaintiff's forum selection. If improper venue is not challenged in the answer or pre-answer stage of the case, the challenge is waived. FED. R. CIV. P. 12(h)(1); *see also Albany Ins. Co. v. Almacenadora Somex, S.A.*, 5 F.3d 907, 909 (5th Cir. 1993). "If a proper objection is made to venue, it is for the court to determine whether the objection is well taken. The court, rather than a jury, decides contested fact issues relating to the venue question." 15 C. WRIGHT, A. MILLER & E. COOPER, FEDERAL PRACTICE AND PROCEDURE § 3826 (2d ed. 1986). The plaintiff has the burden of establishing that venue is proper in the district selected. *Nelson v. International Paint Co., Inc.*, 734 F.2d 1084, 1089 (5th Cir. 1984).

Section 1391(a) of Title 28 of the United States Code states:

> A civil action wherein jurisdiction is founded only on diversity of citizenship may, except as otherwise provided by law, be brought only in (1) a judicial district where any defendant resides, if all defendants reside in the same State, (2) a judicial district in which a substantial part of the events or omissions giving rise to the claim occurred, or a substantial part of property that is the subject of the action is situated, or (3) a judicial district in which any defendant is subject to personal jurisdiction at the time the action is commenced, if there is no district in which the action may otherwise be brought.

If a court determines that venue is improper under § 1391, the court may dismiss the case, or, in the interest of justice, transfer the case to any district or division in which it could have been brought. 28 U.S.C. § 1406(a).

Rule 12(b)(6) Failure to State a Claim

Motions to dismiss for failure to state a claim are appropriate when a defendant attacks the complaint because it fails to state a legally cognizable claim. FED. R. CIV. P. 12(b)(6). The test for determining the sufficiency of a complaint under Rule 12(b)(6) was set out by the United States Supreme Court as follows: "[A] complaint should not be dismissed for failure to state a claim unless it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief." *Conley v. Gibson*, 355 U.S. 41, 45-46 (1957). *See also, Grisham v. United States*, 103 F.3d 24, 25-26 (5th Cir. 1997).

Subsumed within the rigorous standard of the Conley test is the requirement that the plaintiff's complaint be stated with enough clarity to enable a court or an opposing party to determine whether a claim is sufficiently alleged. *Elliott v. Foufas*, 867 F.2d 877, 880 (5th Cir. 1989). Further, "the plaintiffs complaint is to be construed in a

light most favorable to the plaintiff, and the allegations contained therein are to be taken as true." *Oppenheimer v. Prudential Sec., Inc.*, 94 F.3d 189, 194 (5th Cir. 1996). This is consistent with the well-established policy that the plaintiff be given every opportunity to state a claim. *Hitt*, 561 F.2d at 608. In other words, a motion to dismiss an action for failure to state a claim "admits the facts alleged in the complaint, but challenges plaintiff's rights to relief based upon those facts." *Tel-Phonic Servs., Inc. v. TBS Int'l, Inc.*, 975 F.2d 1134, 1137 (5th Cir. 1992). Finally, when considering a Rule 12(b)(6) motion to dismiss for failure to state a claim, the district court must examine the complaint to determine whether the allegations provide relief on any possible theory. *Cinel v. Connick*, 15 F.3d 1338, 1341 (5th Cir. 1994).

III.

DISCUSSION

Rule 12(b)(1) Subject Matter Jurisdiction

The Declaratory Judgment Act is not an independent basis for federal jurisdiction. Before declaratory relief can be granted, federal subject matter jurisdiction requirements must be satisfied. *Skelly Oil Co. v. Phillips Petroleum Co.*, 339 U.S. 667, 671 (1950). Actions for declaratory relief must, therefore, be between parties of diverse citizenship or "arise under" federal law. Moreover, the Declaratory Judgment Act authorizes declaratory relief only in a "case of actual controversy." 28 U.S.C. § 2201. This requirement is the same as the "case or controversy" requirement of Article III of the United States Constitution. *Middle South Energy, Inc. v. City of New Orleans*, 800 F.2d 488, 490 (5th Cir. 1986).

Defendants have raised the issue that Plaintiff has failed to plead a substantive jurisdictional basis for this Court to entertain a dispute filed under the Declaratory Judgment Act. Plaintiff alleges that there is federal

subject matter jurisdiction pursuant to 28 U.S.C. §§ 1332(a)(1). Defendants claim that this Court does not have subject matter jurisdiction because some of the Defendants' claims do not exceed $75,000. Plaintiff directs the Court to Defendants' demand letters wherein every letter except three demands more than $75,000.

Regarding the three Defendants whose actual monetary figures did not exceed $75,000, the additional demands for attorneys' fees and punitive damages exalts the total amount in controversy over $75,000. *See U.S. Fire Ins. Co. v. Villegas*, 242 F.3d 279, 283 (5th Cir. 2001). Plaintiff, relying on Defendants' demand letters, had a good faith belief that the amount in controversy was met.

Plaintiff does not make conclusory statements that the amount in controversy exceeds $75,000. Because Defendants did not submit any evidence refuting Plaintiff 's amount in controversy, this Court looks only to the face of the pleadings to determine the sufficiency of the amount in controversy. *Paterson v. Weinberger*, 644 F.2d 521, 526 (5th Cir. 1981); *Bradley v. U.S. Dept. of Commerce, PTO*, 598 F.Supp. 38, 39 (N.D. Tex. 1984). This Court is satisfied that the amount in controversy exceeds $75,000.

Defendants also contend that there is no case or controversy between Plaintiff and Defendants. Plaintiff claims that an actual case or controversy does exist between the parties.

Plaintiff bases this claim on the numerous demand letters received from Defendants. The demand letters stated in part, "[I]n the event Dow [Plaintiff] fails to take advantage of this settlement offer, we will have no other alternative but to recommend to our client [Defendants] that a lawsuit will be filed and prosecuted." As a general rule, an actual case or controversy exists where a "substantial controversy of sufficient immediacy and reality [exists] between parties having adverse legal

interests." *Middle South Energy Inc. v. City of New Orleans*, 800 F.2d 488, 490 (5th Cir. 1986). The threat of litigation, if specific and concrete, can establish a case or controversy upon which declaratory judgment can be based. *Orix Credit Alliance, Inc. v. Wolfe*, 212 F.3d 891, 897 (5th Cir. 2000). The Court is satisfied that an actual case or controversy exists between Plaintiff and Defendants.

Rule 12(b)(3) Improper Venue

Venue relates to the locality in which a lawsuit may be properly brought. *Minnesota Min. & Mfg. Co. v. Eco Chem, Inc.*, 757 F.2d 1256, 1264 (Fed. Cir. 1985), *citing Neirbo v. Bethlehem Shipbuilding Corp.*, 308 U.S. 165, 167-68 (1939). The purpose of a venue requirement is to protect defendants from being forced to defend lawsuits in a court remote from their residence or from where the acts underlying the controversy occurred. *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 84 F.3d 1408, 1410 (Fed. Cir. 1996).

Defendants claim that venue is improper in this Court and that this Court should dismiss or transfer this case to the Abilene Division, Amarillo Division, Ft. Worth Division, San Angelo Division, and the Wichita Falls Division of the Northern District of Texas. Plaintiff alleges venue is proper in the Lubbock Division pursuant to 28 U.S.C. § 1391(a)(1). Section 1391(a)(1) provides:

> (a) A civil action wherein jurisdiction is founded only on diversity of citizenship may, except as otherwise provided by law, be brought only in (1) a judicial district where any defendant resides, if all defendants reside in the same State, ...

Section 1391(a)(1) speaks in terms of districts and not divisions. It appears to the Court that Defendants have confused the two terms. Venue is proper in the Lubbock Division because every named defendant resides in the

Northern District of Texas; Section 1391 (a)(1) requires that any one defendant reside in the district when all of the defendants reside in the state. Moreover, Defendants' argument that more than half of the Defendants reside outside the Lubbock Division—in the Abilene, Amarillo, Ft. Worth, San Angelo, and Wichita Falls Divisions of the Northern District & Texas—establishes the propriety of venue in the Northern District. If venue is proper in the Abilene, Amarillo, Ft. Worth, San Angelo, or Wichita Falls Division, it is *ipso facto* proper in the Lubbock Division.

Discretionary Abstention

The Declaratory Judgment Act states that courts may declare rights; however, they may decline to do so. *Brillhart v. Excess Ins. Co. of Am.*, 316 US 491, 494 (1942). It is well settled in the Fifth Circuit that a district court has discretion over whether to decide or dismiss a declaratory judgment action. *Granite State Ins. Co. v. Tandy Corp.*, 986 F.2d 94 (5th Cir. 1992). Defendants urge this Court to exercise its discretion and to decline jurisdiction over this matter.

The relevant factors which this Court must consider include 1) whether there is a pending state action in which all of the matters in controversy may be fully litigated; 2) whether the plaintiff filed suit in anticipation of a lawsuit filed by the defendant; 3) whether the plaintiff engaged in forum shopping in bringing the suit; 4) whether possible inequities in allowing the declaratory plaintiff to gain precedence in time or to change forums exist; 5) whether the federal court is a convenient forum for the parties and witnesses; and 6) whether retaining the lawsuit in federal court would serve the purposes of judicial economy. *Travelers Ins. Co. v. Louisiana Farm Bureau Federation*, 996 F.2d 774, 778 (5th Cir. 1993).

First, there are currently numerous pending state court proceedings; however, Plaintiff filed this suit more than a month before any of the pending state court suits

were filed. *See Rowan Companies, Inc. v. Ainsworth*, 5 F.Supp.2d 420, 422 (5th Cir. 1998). Moreover, this factor is not dispositive and Fifth Circuit precedent requires the Court to examine several factors and does not restrict the inquiry to only this one factor. *See Travelers*, 996 F.2d at 777. The second and third factors support a denial of abstention: Plaintiff neither brought this suit in anticipation nor did Plaintiff forum shop in bringing this suit. Plaintiff brought this suit in an effort to avoid multiple lawsuits in numerous state courts; Plaintiff had already received seventy-five demand letters from individual Defendants before filing suit. Additionally, Plaintiff was not forum shopping when it chose to file suit in Lubbock. Defendants' argument that Plaintiff was forum shopping because all of the Defendants do not reside in the Lubbock Division must fall since all of the Defendants do reside in the Northern District of Texas and this suit is properly before this Court.

With regard to the fourth and fifth factors, Defendants have failed to point to any inequities that this forum would pose other than the fact that all Defendants do not reside in Lubbock. This argument, however, fails for the reasons previously discussed. In addition, Lubbock provides a convenient forum for the parties and witnesses when the location of all the Defendants, as well as the Plaintiff, is considered. The final factor, judicial economy, weighs heavily in support of retention of this case. Plaintiff brought this suit in this Court to avoid a multiplicity of suits in various state courts throughout Texas. Multiple lawsuits in various courtrooms could result in differing and conflicting decisions as well as a waste of judicial time.

Plaintiff 's goal in bringing this suit to avoid multiple lawsuits is consistent with the purpose of the Declaratory Judgment Act. *Travelers*, 996 F.2d 774, 776. After addressing the applicable law in light of the facts of this case, it is clear that abstention is inappropriate.

Rule 12(b)(6) Failure to State a Claim

Defendants argue that this suit should be dismissed because Plaintiff has failed to state a claim. However, after examination, the Court finds that Plaintiff has stated a claim for which relief may be granted.

IV.

CONCLUSION

For the reasons previously discussed, Defendants' Motion to Dismiss for Lack of Subject Matter Jurisdiction, Improper Venue and Lack of Subject Matter Jurisdiction is **DENIED**. Defendants' Motion to Dismiss Plaintiff's suit under the Court's discretionary authority to abstain is **DENIED**. All relief not expressly granted is **DENIED**.

SO ORDERED this 12TH day of March, 2002.

/s/ Sam R. Cummings
SAM R. CUMMINGS
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

[Stamp omitted]

DOW AGROSCIENCES, LLC,	)	
	)	
Plaintiff,	)	
v.	)	Civil Action No.
	)	5-01-CV-331-C
DENNIS BATES, *et al.*,	)	
	)	
Defendants.	)	

[Filed Mar. 13, 2002]

PLAINTIFF DOW AGROSCIENCES LLC'S BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT ON PRINCIPLES OF FEDERAL PRE-EMPTION AND THE UNIFORM COMMERCIAL CODE

Fernando M. Bustos
State Bar #24001819
McCleskey, Harriger, Brazill
& Graf, LLP
PNB Financial Building
5010 University Avenue
P.O. Box 6170
Lubbock, Texas 79493
Telephone: (806) 796-7300
Telecopier: (806) 796-7365

Frank L. Hill
State Bar #09631500
Thompson & Knight
1200 San Jacinto Center
98 San Jacinto Boulevard
Austin, TX 78701-4081
Phone: (512) 496-6100
Fax: (512) 496-6180

ATTORNEYS FOR
PLAINTIFF

[Text Omitted, Exhibits Excerpted]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF RAFAEL HERRERA

Rafael Herrera, being duly sworn, deposes and says:

1. My name is Rafael Herrera. I am an adult, over the age of 21 years and I am competent to testify as to all matters stated herein.

2. I am employed by Dow AgroSciences LLC ("Dow AgroSciences") as a Registration manager for, among others, Strongarm• herbicide. I am familiar with the facts and circumstances discussed herein, which are based upon personal knowledge and upon review of business records of Dow AgroSciences.

3. As Registration Manager for Dow AgroSciences, I am responsible for all matters concerning the federal registration of Strongarm herbicide pursuant to the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"). I am familiar with the regulations promulgated and enforced pursuant to FIFRA by the Environmental Protection Agency ("EPA") and other applicable federal laws and regulations.

• Trademark of Dow AgroSciences LLC

4. My responsibilities as Registration manager include assuring that Dow AgroSciences fully complies with applicable EPA requirements and regulations concerning the federal registration of Strongarm herbicide.

5. The EPA accepted the product label for Strongarm herbicide on March 8, 2000, and assigned registration number 62719-288. Attached hereto as **Exhibit A** is a true and accurate stamped copy of the EPA's acceptance and the accepted product label. The acceptance was conditioned upon Dow AgroSciences submitting the data listed therein, which Dow AgroSciences thereafter submitted.

6. At all times relevant hereto, Dow AgroSciences sold Strongarm herbicide only with EPA-accepted labels affixed to the product at the time of the sale. A true and accurate copy of the product label in effect during the time period relevant to the claims involved in the above-referenced lawsuit bears Label Code D02-044-003 and is attached hereto as **Exhibit B**.

7. By its acceptance of the product label for Strongarm herbicide, the EPA determined that the data submitted by Dow AgroSciences in support of its registration complied with all FIFRA requirements.

FURTHER, the affiance sayeth not.

/s/ Rafael Herrera

Dated: 03/01/2002 Rafael Herrera

[Notary Omitted]

EXHIBIT A

[Seal Omitted]

U.S. Environmental Protection Agency
Office of Pesticide Programs
Registration Division
401 "M" St., S.W.
Washington, D.C. 20460

Notice of Pesticide:
X Registration
_ Reregistration
Under FIFRA, as amended

EPA Reg. Number: 62719-288
Date of Issuance: Mar 8, 2000
Term of Issuance: Conditional
Name of Pesticide Product: Strongarm

Name and Address of Registrant (include ZIP Code):
Dow AgroSciences
9330 Zionsville Road
Indianapolis, IN 46268-1054

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5), 3(g), or 4 when the Agency requires all registrants of similar products to submit such data.

2. Submit the following data and information by February 28, 2001:

a. A new ames mutagenicity test conducted at adequate dose levels.

b. Additional information concerning the metabolism study for poultry and eggs and the rotational crop study. The storage time between sampling and analysis for poultry, eggs, and rotational crops must be reported. If the storage time was longer than 6 months, adequate data concerning the stability of residues during the storage period between collection and final analysis must be provided.

c. Analysis of plant metabolism or field trial samples of peanut and soybean for 2,6-dichloroaniline (2,6-DCA) using a validated method at the parts per billion level. The storage time between sampling and analysis for 2,6-DCA must be reported. If the storage time was longer than 6 months, adequate data concerning the stability of 2,6-DCA residues during the storage period between collection and final analysis must be provided.

Signature of Approving Official: Date:

[SIGNATURE OMITTED] March 8, 2000

3. To reduce the risk to nontarget plants, the labeling must be revised at the next label printing and prior to February 28, 2001 to add following precautionary statements:

Avoid all direct or indirect contact with nontarget plants.

Do not apply near desirable vegetation and allow adequate distance between target area and desirable plants to minimize exposure.

Do not apply under conditions which favor runoff or wind transport of soil containing diclosulam to nontarget areas

To prevent off-site movement due to runoff or wind erosion.

- Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
- Do not apply to impervious substrates, such as paved or highly compacted surfaces or frozen or snow-covered ground.
- Do not apply to soils when saturated with water.
- Do not use water from the first flood or furrow irrigation from treated fields to irrigate nontarget crops unless there has been at least 1/2 inch of rainfall during the period between application and first irrigation.

Do not apply when weather conditions favor drift to nontarget sites. To minimize spray drift to nontarget areas:

- Use low pressure application equipment capable of producing a large droplet spray.

- Do not use nozzles that produce a fine droplet spray.
- Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
- Keep ground-driven spray boom as low as possible above the target surface.
- Spray only when there is no wind or when wind speed is low. Do not apply when wind is gusting or when wind speed is greater than 10 mph.

4. The Agency requests additional positive control data and untransformed motor activity data for the acute neurotoxicity study and the 1-year neurotoxicity study.

5. Submit two copies of the final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

If you have any questions about this letter, please contact Tobi Colvin-Snyder at 703-305-7801.

Jim Tompkins
Product Manager (25)
Herbicide Branch
Registration Division (7505C)

13A / Strongarm / Prop Sec 3 (Peanuts Only) / 03-01-00

(Base label):

(logo) Dow AgroSciences LLC [Stamp Omitted]

Strongarm*

For Broadleaf Weed Control in Peanuts

Active Ingredients:
diclosulam: N-(2,6-dichlorophenyl)-5-ethoxy-7-fluorol[1,2,4]triazolo-[1,5-c]pyrimidine-2-sulfonamide.....84%
Inert Ingredients.....16%
Total 100%

Contains 0.84 pounds of active ingredient per pound of product.

U.S. Patent No. 5,163,995

Keep Out of Reach of Children

CAUTION PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes Moderate Eye Irritation. Harmful If Absorbed Through Skin

Avoid contact with eyes, skin, or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves

- Shoes plus socks

Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

First Aid

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or when disposing of equipment washwaters.

This chemical and its transformation products demonstrate the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This chemical can contaminate surface water through spray drift.

Under some conditions, this chemical, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks post-application.

Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for additional Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-288 EPA Est. 00000-XX-00

*Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

Herbicide

Net Wt. __ lb

(Label Booklet cover):

(logo) Dow AgroSciences LLC

Strongarm*

For Broadleaf Weed Control in Peanuts

Active Ingredients:
diclosulam: N-(2,6-dichlorophenyl)-5-ethoxy-7-fluorol[1,2,4]triazolo-[1,5-c]pyrimidine-2-sulfonamide.....84%
Inert Ingredients.....16%
Total 100%

Contains 0.84 pounds of active ingredient per pound of product.

U.S. Patent No. 5,163,995

Keep Out of Reach of Children

CAUTION PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations

and Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-288 EPA Est. 00000-XX-00

*Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

Herbicide

Net Wt __ lb

(Page 1 through end):

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Causes Moderate Eye Irritation • Harmful If Absorbed Through Skin

Avoid contact with eyes, skin, or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

First Aid

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.
If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

Environmental Hazards:

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean

high water mark. Do not contaminate water by cleaning of equipment or when disposing of equipment washwaters.

This chemical and its transformation products demonstrate the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This chemical can contaminate surface water through spray drift.

Under some conditions, this chemical, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks post-application. Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

Disposal: Wastes resulting from the use of this product may be disposed of on site according to label use directions or at an approved waste disposal facility.

Container Disposal: When all packets are used, dispose of empty package in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

General Information

Strongarm* herbicide is a soil-applied product for control of broadleaf weeds in peanuts. Strongarm may also be used postemergence in peanuts.

Soil application: A single preplant incorporated, preplant surface, or preemergence application may be made in peanuts.

Postemergence application: A single postemergence application may be made in peanuts.

General Use Precautions and Restrictions

Maximum Application Rates

- In peanuts, do not apply more than 0.45 oz of Strongarm per acre per year in any combination of preplant incorporated, preplant surface, preemergence or postemergence applications.
- **Note:** Only a single soil application per growing season may be made in peanuts.

Preharvest Interval

Do not harvest peanuts for 30 days following application.

Read and carefully follow all applicable directions, precautions and restrictions on labeling for other products used in combination with Strongarm.

Aerial application of this product is prohibited.

Do not allow livestock to graze treated areas or harvest forage or hay from treated areas.

Iron Chlorosis: There are isolated areas of the country where soil-induced iron chlorosis routinely occurs. Severity of iron chlorosis symptoms may increase when Strongarm is soil-applied in areas with a history of soil-induced iron chlorosis or other nutrient induced crop injury.

Proper Handling Instructions

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to

contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Chemigation: Do not apply this product through any type of irrigation system.

Do not use flood irrigation to apply or incorporate this product.

This product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Crop Rotation Interval for Common Crops

Crop	Rotation Interval (1) (Months)
soybeans, peanuts	no restriction
wheat, barley	4
oats, rye	6
cotton	10
corn (2), rice, tobacco, sorghum	18
sugar beets, sunflowers and other crop not listed	30 (3)

1. Minimum number of months that must pass before planting other crops after application of Strongarm at up to 0.45 oz/acre in peanuts.
2. The crop rotation interval for corn hybrids identified as "IR" is 10 months.
3. Rotation to sugar beets, sunflowers, and all other crops not listed requires a 30-month rotation interval and a successful field bioassay.

Field Bioassay Instructions

Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop variety across the field previously treated with Strongarm. Plant the steps perpendicular to the direction Strongarm was applied. The strips should also be located so that different field conditions are encountered, including differences in soil texture, pH, and drainage. If the crop does not show visible symptoms of injury, stand reduction, or yield reduction, the field can be seeded with the test crop in the growing season following the bioassay. If visible injury, stand reduction, or yield reduction occurs, the test crop should not be seeded, and the bioassay must be repeated the next growing season.

Mixing and Application

Spray Volume and Application

Apply Strongarm in sufficient spray volume to provide uniform coverage. A spray volume of 10 or more gallons per acre is recommended for soil applications. Sufficient agitation should be maintained during mixing and spraying to ensure a uniform spray mixture. Apply with ground equipment using standard low pressure (20 to 40 psi) herbicide sprayers equipped with nozzles that provide uniform spray coverage. Screens in lines should be finer than 50 mesh (100 mesh is finer than 50 mesh).

Strongarm Applied Alone

Strongarm water dispersible granules are provided in water soluble packets that require thorough mixing. **Note:** The water soluble packets are not soluble in liquid fertilizer. If applied in liquid fertilizer, Strongarm **must be** pre-mixed (slurried) with water and then added to the liquid fertilizer solution. Premixing may also be used to aid in mixing with water. See pre-mixing instructions below.

Handling Precautions for Water Soluble Packets: Do not remove water soluble packet from overpack except for immediate use. Do not open water soluble packets (product in transparent film). Do not allow water soluble packet to come into contact with water prior to use. Do not handle water soluble packet with wet hands or wet gloves. Carefully reseal overpack containing unused water soluble packets and protect package from moisture.

Determining the Number of Water Soluble Packets Required:

Application Rate (oz/acre)	Acres per Individual Bubble Packet
0.45+	1.0

Formula: Acres to be treated + Acres/Packet = Number of Packets

Mixing Order:

1. Fill the tank with 1/2 of the total amount of water or liquid fertilizer for the load. **Note:** If liquid fertilizer is being used as the spray carrier, water-soluble packets must be pre-mixed as described below before adding to the spray tank. Start the agitation system.
2. Add water soluble packets by opening the overpack and adding the packet (product in transparent film) directly into the spray tank while agitating. Before spraying, make sure packets have completely

disintegrated and product is thoroughly mixed with water. Depending on the water temperature and the degree of agitation, the packet and its contents should be completely dispersed within 5 minutes from the time they were added to the water.

3. Postemergence or burndown application: Add any surfactant or other adjuvant material last.

4. Continue agitation and finish filling tank.

Note: To ensure a uniform spray mixture continuous agitation is required during application. If product is allowed to settle, thoroughly agitate to resuspend the mixture before spraying. To ensure product effectiveness, apply within 24 hours of mixing. Weed control with Strongarm that has been mixed and allowed to stand for more than 48 hours may be reduced.

Strongarm Applied in Tank-mix Combination

If a broader spectrum of weed control is required, Strongarm may be tank-mixed with labeled rates of other herbicides provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product.

Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates for respective products or maximum allowable application rates for any active ingredient in the tank mix.
- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment

has been adequately cleaned. (See Equipment Clean-Out Procedures.)

- Always perform a (jar) test to ensure, the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of Strongarm and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. The mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank-mixes. Sparger type agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing into the spray mixture.

Mixing Order for Tank-mixes:

1. Fill the spray tank to 1/2 of the total spray volume required with water or liquid fertilizer. **Note:** If liquid fertilizer is being used as the spray carrier, water-soluble packets must be pre-mixed as described below before adding to the spray tank. Start the agitation system.

2. Add water soluble packets by opening the overpack and adding water soluble packet (product in transparent film) directly into the spray tank while agitating and allow time to disperse. Allow time for complete mixing (approximately 5 minutes). Before adding other products, make sure packets have completely disintegrated and product is thoroughly mixed.

3. Add different formulation types in the following order: (1) Other formulation packaged in water soluble film; (2) Any compatibility agent, if required; (3) other dry flowables; (4) wettable powders; (5) aqueous suspensions, flowables and liquids. Maintain agitation and fill spray tank to 3/4 of total spray volume and add: (5) emulsifiable concentrates and (6) solutions (i.e., fertilizers). Allow time for complete mixing after each addition.
4. Postemergence or burndown application: Add any surfactant or other adjuvant material last.
5. Finish filling the spray tank. Maintain continuous agitation during mixing and throughout application.

If application or agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be re-suspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to re-suspend than when originally mixed.

Pre-mixing (Slurry) of Water Soluble Packets

The film used in water soluble packaging for Strongarm is not soluble in liquid fertilizer solutions. In order to add Strongarm to liquid fertilizer carrier, the product **must be** premixed with water. Pre-mixing is also an alternative mixing method for application in water. Use a minimum 2 fl oz. of water for each individual 0.45 oz water soluble packet of Strongarm. The packets can be stirred immediately on addition to water or allowed to dissolve. Stir (or shake if pre-mixed in a closed container) until the packets are completely dissolved and granules are dispersed and then add to the spray tank or inductor (recommended through a 20-35 mesh screen). Rinse container used for pre-mixing and add rinsate to spray tank.

Pre-mixing (other products): If pre-mixing is required for other dry or flowable products applied in tank-mix combination with Strongarm, follow recommendations for pre-mixing of such products provided in their respective product labels.

Equipment Clean-out Procedures:

1. Drain any remaining spray mixture from the application system.
2. Hose down the interior surfaces of the tank while filling the tank 1/2 full with water.
3. Add household ammonia, at a rate of 1 gallon per 100 gallons of water. Recirculate for 5 minutes and spray out part of this mixture for 5 minutes through the boom. Drain tank.
4. Remove all spray nozzles and screens and clean separately.

Note: If this spray equipment will be used on a crop that is sensitive to Strongarm, steps 1-3 should be repeated. Exterior surfaces of spray equipment should also be washed thoroughly.

All rinsate should be disposed of on site or at an approved waste disposal facility.

Application with Dry Bulk Fertilizer (Soil Application Only)

Dry bulk fertilizer may be impregnated or coated with Strongarm. Soil applications of Strongarm with dry bulk fertilizer can provide weed control equal to the same rates of Strongarm applied in liquid carriers. Follow label recommendations, including application rates, precautions and limitations for soil application.

Apply the recommended rate of Strongarm in 200 to 700 lb/acre of dry bulk fertilizer using calibrated equipment. To avoid caking, apply the mixture as soon as possible after blending. Uniform application of the herbicide/

fertilizer mixture essential for satisfactory weed control and to prevent possible crop injury.

In areas where conventional tillage is practiced, shallow soil incorporation of the mixture may improve weed control.

Some fertilizer blends tend to absorb moisture, especially under high humidity conditions. Under humid conditions, the addition of a drying agent such as Celatom or Microcel (diatomaceous earth) may be necessary to prevent caking. Use of a drying agent is recommended if the fertilizer mixture will not applied immediately.

Most absorbent dry fertilizers can be used for impregnation with Strongarm. Pure ammonium nitrate and/or limestone will not absorb the herbicide and are not suitable for impregnation with Strongarm. Absorbent fertilizer blends containing ammonium nitrate and/or limestone as part of a mixture may be suitable for impregnation.

Compliance with all Federal and State regulations relating to blending pesticide mixtures with dry bulk fertilizer registration, labeling and application are the responsibility of the individual and/or company offering the fertilizer and chemical mixture for sale.

Impregnation: Strongarm must be premixed with water to form a slurry prior to impregnation of dry bulk fertilizer. For best results, use a minimum of 6 fl oz of water for each individual 0.45 oz water soluble packet of product.

Pre-mixing can be accomplished by shaking the water soluble packets and water together in a closed container with a small amount of a silicon-based defoaming agent. Inspect the mixture to assure the Strongarm is completely dispersed in water and the water soluble packaging has completely dissolved. Add sufficient water to adjust the total volume of the mixture to deliver a spray volume of

0.5 to 1.0 gallons per ton of fertilizer. Use constant agitation to keep the spray mixture suspended.

Spray nozzle selection and placement are critical for uniform spray coverage. The recommended spray time is no less than 3-5 minutes per batch. Nozzle placement should minimize spray overlap in the blender and also avoid spraying the mixer walls. The use of a suitable in-line (no finer than 100-mesh) screen is also recommended to avoid spray blockages. Any closed drum, belt, ribbon or other commonly used dry bulk fertilizer blender may be used.

Calculate amounts of Strongarm by the following formula:

$\frac{2{,}000}{\text{Pounds of fertilizer per acre}}$	X	ounces/acre of Strongarm	=	ounces of product Stronarm per ton of fertilizer

Example:

$\frac{2{,}000}{\text{250 Lbs of fertilizer per acre}}$	X	0.45 ounces/acre of Strongarm	=	3.6 ounces of product per ton of fertilizer

Note: It is imperative to thoroughly flush the fertilizer dry blending equipment prior to preparing blends with other herbicides. Flushing may be accomplished by running 1-2 loads of dry fertilizer, which must be used only in peanuts or soybeans. Inspect the equipment carefully for any spray buildup or deposits from earlier batches and wash or remove as appropriate. Where possible, rinse the blenders with water, followed by bleach or ammonia solution. The rinsate can be mixed with the fertilizer used for flushing, but at no more than 1 gallon of rinsate per ton of fertilizer.

Approved Uses

PEANUTS (Soil Application)

Strongarm may be used in various tillage programs including, but not limited to, strip till, no tilt and conventional tillage operations. Application of Strongarm on soils with greater than 5% organic matter may result in reduced weed control and require subsequent postemergence applications of other herbicides appropriate for specific weeds. Do not use on peat or muck soils. Season-long control of severe weed infestations may require a postemergence application of complimentary herbicides following application of Strongarm.

***Note**: Environmental and soil factors can influence the performance and selectivity of any herbicide treatment. Rainfall of 0.5 inches or greater is required for optimum weed control by most soil herbicides, including Strongarm. Strongarm and other herbicides when incorporated will perform most optimally when evenly distributed in the surface soil. When emergence of the planted crop is delayed due to unusually cool and/or wet conditions, factors such as pH, disease, and nutrient deficiencies can contribute to reduced crop tolerance to a soil-applied herbicide.*

Cultivation: If required, cultivation should be shallow to avoid excessive movement of treated soil and to expose weed seed buried deep within the soil.

Area of Use (Peanuts): Use of Strongarm is recommended in all areas where peanuts are grown.

Application Rates	
Crop	Strongarm (oz/acre)
Peanuts	0.45
Weeds Controlled	
bristly starbur common cocklebur common lambsquarters common ragweed common sunflower eclipta devil's-claw Florida beggarweed giant ragweed morningglory species nutsedge species (1, 2) Palmer amaranth	Pennsylvania smartweed prickly sida redroot pigweedsmooth pigweed spurred anoda spurge species shining tickweed tropic croton Virginia Copper Leaf velvetleaf wild poinsetta

Note: Numbers in parentheses "(-)" refer to footnotes below.

1. Heavy infestations may require postemergence application of complimentary herbicides following a soil application of Strongarm for season-long control.
2. The level of nutsedge control provided by Strongarm on nutsedge can vary depending on weed density and soil or environmental conditions.

For best results:

- Fields should be clean-tilled and weed-free.
- Apply **Strongarm** as close as possible to planting.
- If irrigation is available, immediately apply 0.25 to 0.5 inch of water.
- Cultivation, a tank mixture, or applications of postemergence herbicides may also be needed to achieve desired level of control.

Application Directions

Preplant Incorporated Application

Apply Strongarm alone or in tank-mix combination with other herbicides registered for preplant incorporated application. Apply to a seedbed that is relatively free of clods. Incorporate the herbicide(s) into the top 1 to 3 inches of the final seedbed using equipment that provides thorough soil mixing. Do not apply Strongarm more than 4 weeks before planting. For optimum results, apply Strongarm at or just prior to planting. When Strongarm is applied in tank-mix combination with other herbicide(s), follow the incorporation directions for the tank-mix partner(s). Follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank-mixture.

Preplant Surface Application

Apply Strongarm alone or in tank-mix combination with other herbicides registered for preplant soil surface applications. Apply to a seedbed that is relatively free of clods. Do not apply Strongarm more than 4 weeks before planting. For optimum results, apply Strongarm at or just prior to planting. Soil surface applications are not effective until rainfall or irrigation of at least 0.25 - 0.5 inches has moved Strongarm into soil where weed germination occurs. If rainfall is not anticipated, shallow (i.e., 2 inches) incorporation prior to planting is recommended to place Strongarm in contact with germinating weeds. If applied in tank-mix combination, follow use instructions, including application rates, precautions and restrictions of each product used in the tank-mixture. For minimum-tillage or no tillage or reduced tillage systems, when weeds are present at the time of application, apply in a tank mix combination a contact herbicide such as Starfire or Roundup herbicide.

Note: Reduced weed control in the planted row may occur from exposure of untreated soil during the planting

operation if surface applications are not incorporated prior to planting.

Burndown Application

When used as a no-till burndown application, Strongarm provides foliar control of specific broadleaf weeds (mostly starbur, common cocklebur, common and giant ragweed, common sunflower, Florida beggarweed, morning glory species, tropic croton, and velvetleaf) and residual control of broadleaf weeds listed above for soil applied applications. For optimum results, apply Strongarm within 2 weeks of planning. If applied as a burndown application in tank-mix combination with another herbicide(s), use only adjuvants that are recommended for the tank-mix partner(s). When tank-mixing with other herbicides, a jar test for compatibility is always recommended (see "Compatibility Testing" in the "Mixing and Application" section).

Mixing Order: When tank mixing with glyphosate and ammonium sulfate, add ammonium sulfate to the tank mixture before adding glyphosate.

Preemergence Application

Apply after planting but prior to crop or weed emergence. Preemergence applications are not effective until rainfall or irrigation of at least 0.25 - 0.5 inches has moved Strongarm into the soil where weed germination occurs. Strongarm may be applied alone or in tank-mix combination with herbicides registered for preemergence application. When applied in tank-mix combination, follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank-mixture. For optimum results, Strongarm should be applied at or near planting, prior to germination of weeds and emergence of the crop.

Postemergence Application (Peanuts Only)

Apply Strongarm as a broadcast spray when weeds are in the 1 to 4 leaf stage and actively growing. Applications made to larger weeds or to weeds under stress may result in unsatisfactory control. Optimum weed control will be obtained by applying Strongarm under favorable growing conditions (i.e., moisture and adequate soil temperature). Applications may occur from peanut cracking through pegging.

Strongarm may be applied alone or in tank mix combination with other postemergence herbicides registered for use in peanuts. Applications of Strongarm must include either a crop oil concentrate, or a nonionic surfactant.

Weeds Controlled	Strongarm (oz/acre)
common cocklebur common ragweed Florida beggarweed hemp sesbania morningglory species nutsedge species pricky sida smartweed spurge species velvetleaf	0.15 - 0.45

Adjuvant Systems for Postemergence Application

Use in combination with one of the following adjuvant systems approved for application to growing crops:

- Nonionic surfactant (0.125 - 0.25% v/v)

- Nonionic surfactant (0.125 - 0.25% v/v) plus urea ammonium nitrate solution (2.5% v/v); dry ammonium sulfate may be used at a rate of 2 lbs per acre as a substitute for urea ammonium nitrate.
- Crop oil concentrate or methylated seed oil (1.2% v/v)
- Crop oil concentrate or methylated seed oil (1.2% v/v) plus urea ammonium nitrate solution (2.5% v/v)

Note: Use of crop oil concentrate or methylated seed oil plus urea ammonium nitrate is preferred when weeds are under drought stress, but may increase crop injury.

Tank Mix Applications

When applied in tank mix combination with other herbicides follow applicable use instructions, including application rates, precautions and restrictions for each product used in the tank mixture, including use of adjuvants.

Minimum Tillage, No Tillage, Strip Tillage, or other reduced tillage systems

In these tillage systems, where peanuts are planted directly into a cover crop, stale seedbed, or previous crop residues, a contact herbicide such as Starfire or Roundup may be tank mixed with Strongarm to control existing weeds. Apply before, during (behind the planter), or after planting, but before the crop emerges.

Strongarm Followed by Postemergence Treatments

Weeds and grasses not controlled by Strongarm may be controlled with postemergence herbicide products. Follow the postemergence manufacturer's labels for application rates, weeds controlled, applicable use directions, precautions and limitations before use.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to the label instructions (including adverse conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by the buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or

2. Replacement of amount of product used.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage

in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

*Trademark of Dow AgroSciences LLC

EXHIBIT B

Specimen Label

[logo omitted] Dow AgroSciences LLC

Strongarm*

*Trademark of Dow AgroSciences LLC

For Broadleaf Weed Control in Peanuts

Active Ingredients:
diclosulam: N-(2,6-dichlorophenyl)-5-ethoxy-7-fluorol[1,2,4]triazolo-[1,5-c]pyrimidine-2-sulfonamide.....84%
Inert Ingredients.....16%
Total 100%

Contains 0.84 pounds of active ingredient per pound of product.

U.S. Patent No. 5,163,995

EPA Reg. No. 62719-288

Keep Out of Reach of Children

CAUTION PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes Moderate Eye Irritation; Harmful If Absorbed Through Skin

Avoid contact with eyes, skin, or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear.

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

First Aid

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or when disposing of equipment washwaters.

This chemical and its transformation products demonstrate the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This chemical can contaminate surface water through spray drift.

Under some conditions, this chemical, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks post-application. Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Notice: Read the entire label. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. **Exception:** If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

Disposal: Wastes resulting from the use of this product may be disposed of on site according to label use directions or at an approved waste disposal facility.

Container Disposal: When all packets are used, dispose of empty package in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

General Information

Strongarm* herbicide is a soil-applied product for control of broadleaf weeds in peanuts. Strongarm may also be used postemergenoe in peanuts.

Soil application: A single preplant incorporated, preplant surface, or preemergence application may be made in peanuts.

General Use Precautions and Restrictions

Maximum Application Rates

- In peanuts, do not apply more than 0.45 oz of Strongarm per acre per year in any combination of preplant incorporated, preplant surface, preemergence or postemergence applications.
- **Note:** Only a single soil application per growing season may be made in peanuts.

Preharvest Interval

- Do not harvest peanuts for 30 days following application.

Read and carefully follow all applicable directions, precautions and restrictions on labeling for other products used in combination with Strongarm.

Aerial application of this product is prohibited.

Do not allow livestock to graze treated areas or harvest forage or hay from treated areas.

Iron Chlorosis: There are isolated areas of the country where soil-induced iron chlorosis routinely occurs. Severity of iron chlorosis symptoms may increase when Strongarm is soil-applied in areas with a history of soil-induced iron chlorosis or other nutrient induced crop injury.

Proper Handling Instructions

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad.

A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Chemigation: Do not apply this product through any type of irrigation system.

Do not use flood irrigation to apply or incorporate this product.

This product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Precautions for Avoiding Injury to Nontarget Plants

Avoid all direct or indirect contact with nontarget plants.

Do not apply near desirable vegetation and allow adequate distance between target area and desirable plants to minimize expsoure.

Do not apply under considitions that favor runoff or wind transport of soil containing diclosulam to nontarget areas.

To prevent off-site movement due to runofff or wind erosion:

- Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
- Do not apply to impervious substrates, such as paved or highly compacted surfaces or frozen or snow-covered ground.

- Do not apply to soils when saturated with water.
- Do not use water from the first flood or furrow irrigation from treated fields to irrigate nontarget crops unless there has been at least 1/2 inch of rainfall during the period between application and first irrigation.

Do not apply when weather conditions favor drift to nontarget sites. To minimize spray drift to nontarget areas:

- Use low-pressure application equipment capable of producing a large droplet spray.
- Do not use nozzles that produce a fine droplet spray.
- Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
- Keep ground-driven spray boom as low as possible above the target surface.
- Spray only when there is no wind or when wind speed is low. Do not apply when wind is gusting or when wind speed is greater than 10 mph.

Crop Rotation Interval for Common Crops

Crop	Rotation Interval (1) (Months)
soybeans, peanuts	no restriction
wheat, barley	4
oats, rye	6
cotton	10
corn (2), rice, tobacco, sorghum	18
sugar beets, sunflowers and other crop not listed	30 (3)

1. Minimum number of months that must pass before planting other crops after application of Strongarm at up to 0.45 oz/acre in peanuts.
2. The crop rotation interval for corn hybrids identified as "IR" is 10 months.
3. Rotation to sugar beets, sunflowers, and all other crops not listed requires a 30-month rotation interval and a successful field bioassay.

Field Bioassay Instructions

Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop variety across the field previously treated with Strongarm. Plant the strips perpendicular to the direction Strongarm was applied. The strips should also be located so that different field conditions are encountered, including differences in soil texture, pH, and drainage. If the crop does not show visible symptoms of injury, stand reduction, or yield reduction, the field can be seeded with the test crop in the growing season following the bioassay. If visible injury stand reduction, or yield reduction occurs, the test crop should not be seeded, and the bioassay must be repeated the next growing season.

Mixing and Application

Spray Volume and Application

Apply Strongarm in sufficient spray volume to provide uniform coverage. A spray volume of 10 or more gallons per acre is recommended for soil applications. Sufficient agitation should be maintained during mixing and spraying to ensure a uniform spray mixture. Apply with ground equipment using standard low pressure (20 to 40 psi) herbicide sprayers equipped with nozzles that provide uniform spray coverage. Screens in lines should be finer than 50 mesh (100 mesh is finer than 50 mesh).

Strongarm Applied Alone

Strongarm water dispersible granules are provided in water soluble packets that require thorough mixing. **Note:** The water soluble packets are not soluble in liquid fertilizer. If applied in liquid fertilizer, Strongarm **must be** pro-mixed (slurried) with water and then added to the liquid fertilizer solution. Premixing may also be used to aid in mixing with water. See pre-mixing instructions below.

Handling Precautions for Water Soluble Packets: Do not remove water soluble packet from overpack except for immediate use. Do not open water soluble packets (product in transparent film). Do not allow water soluble packet to come into contact with water prior to use. Do not handle water soluble packet with wet hands or wet gloves. Carefully reseal overpack containing unused water soluble packets and protect package from moisture.

Determining the Number of Water Soluble Packets Required:

Application Rate (oz/acre)	Acres per Individual Bubble Packet
0.45	1.0

Formula: Acres to be treated + Acres/Packet = Number of Packets

Mixing Order:

1. Fill the tank with 1/2 of the total amount of water or liquid fertilizer for the toad. **Note:** If liquid fertilizer is being used as the spray carrier, water-soluble packets must be pre-mixed as described below before adding to the spray tank. Start the agitation system.
2. Add water soluble packets by opening the overpack and adding the packet (product in transparent film) directly into the spray tank while agitating. Before spraying, make sure packets have completely

disintegrated and product is thoroughly mixed with water. Depending on the water temperature and the degree of agitation, the packet and its contents should be completely dispersed within 5 minutes from the time they were added to the water.

3. Continue agitation and finish filling tank.

Note: To ensure a uniform spray mixture continuous agitation is required during application. If product is allowed to settle, thoroughly agitate to resuspend the mixture before spraying. To ensure product effectiveness, apply within 24 hours of mixing. Weed control with Strongarm that has been mixed and allowed to stand for more than 48 hours may be reduced.

Strongarm Applied in Tank-mix Combination

If a broader spectrum of weed control is required, Strongarm may be tank-mixed with labeled rates of other herbicides provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product.

Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates for respective products or maximum allowable application rates for any active ingredient in the tank mix.
- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned. (See Equipment Clean-Out Procedures.)
- Always perform a (jar) test to ensure, the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of Strongarm and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank mixes. Sparger type agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing into the spray mixture.

Mixing Order for Tank-mixes:

1. Fill the spray tank to 1/2 of the total spray volume required with water or liquid fertilizer. **Note:** If liquid fertilizer is being used as the spray carrier, water-soluble packets must be pre-mixed as described below before adding to the spray tank. Start the agitation system.
2. Add water soluble packets by opening the overpack and adding water soluble packet (product in transparent film) directly into the spray tank while agitating and allow time to disperse. Allow time for complete mixing (approximately 5 minutes). Before adding other products, make sure packets have completely disintegrated and product is thoroughly mixed.
3. Add different formulation types in the following order: (1) Other formulation packaged in water soluble film; (2) Any compatibility agent, if required; (3) other dry flowables; (4) wettable powders; (5) aqueous suspensions, –flowables and liquids. Maintain agitation and fill spray tank to 3/4 of total

spray volume and add: (5) emulsifiable concentrates and (6) solutions (i.e., fertilizers). Allow time for complete mixing after each addition.

4. Finish filling the spray tank. Maintain continuous agitation during mixing and throughout application.

If application or agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be re-suspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to re-suspend than when originally mixed.

Pre-mixing (Slurry) of Water Soluble Packets

The film used in water soluble packaging for Strongarm is not soluble in liquid fertilizer solutions. In order to add Strongarm to liquid fertilizer carrier, the product must be premixed with water. Pre-mixing is also an alternative mixing method for application in water. Use a minimum 2 fl oz of water for each individual 0.45 oz water soluble packet of Strongarm. The packets can be stirred immediately on addition to water or allowed to dissolve. Stir (or shake if pre-mixed in a closed container) until the packets are completely dissolved and granules are dispersed and then add to the spray tank or inductor (recommended through a 20-35 mesh screen). Rinse container used for pre-mixing and add rinsate to spray tank.

Pre-mixing (other products): If pre-mixing is required for other dry or flowable products applied in tank-mix combination with Strongarm, follow recommendations for pre-mixing of such products provided in their respective product labels.

Equipment Clean-out Procedures:

1. Drain any remaining spray mixture from the application system.

2. Hose down the interior surfaces of the tank while filling the tank 1/2 full with water.

3. Add household ammonia, at a rate of 1 gallon per 100 gallons of water. Recirculate for 5 minutes and spray out part of this mixture for 5 minutes through the boom. Drain tank.

4. Remove all spray nozzles and screens and clean separately.

Note: If this spray equipment will be used on a crop that is sensitive to Strongarm, steps 1-3 should be repeated. Exterior surfaces of spray equipment should also be washed thoroughly.

All rinsate should be disposed of on site or at an approved waste disposal facility.

Approved Uses

PEANUTS (Soil Application)

Strongarm may be used in various tillage programs including, but not limited to, strip till, no tilt and conventional tillage operations. Application of Strongarm soils with greater than 5% organic matter may result in reduced weed control and require subsequent postemergence applications of other herbicides appropriate for specific weeds. Do not use on peat or muck soils. Season-long control of severe weed infestations may require a postemergence application of complimentary herbicides following application of Strongarm.

***Note**: Environmental and soil factors can influence the performance and selectivity of any herbicide treatment. Rainfall of 0.5 inches or greater is required for optimum weed control by most soil herbicides, including Strongarm. Strongarm and other herbicides when incorporated will perform most optimally when evenly distributed in the surface soil. When emergence of the planted crop is delayed*

due to unusually cool and/or wet conditions, factors such as pH, disease, and nutrient deficiencies can contribute to reduced crop tolerance to a soil-applied herbicide.

Cultivation: If required, cultivation should be shallow to avoid excessive movement of treated soil and to expose weed seed buried deep within the soil.

Area of Use (Peanuts): Use of Strongarm is recommended in all areas where peanuts are grown.

Application Rates	
Crop	Strongarm (oz/acre)
Peanuts	0.45
Weeds Controlled	
bristly starbur common cocklebur common lambsquarters common ragweed common sunflower eclipta devil's-claw Florida beggarweed giant ragweed morningglory species nutsedge species (1, 2) Palmer amaranth	Pennsylvania smartweed prickly sida redroot pigweedsmooth pigweed spurred anoda spurge species shining tickweed tropic croton Virginia Copper Leaf velvetleaf wild poinsetta

Note: Numbers in parentheses "(-)" refer to footnotes below.

1. Heavy infestations may require postemergence application of complimentary herbicides following a soil application of Strongarm for season-long control.

2. The level of nutsedge control provided by Strongarm on nutsedge can vary depending on weed density and soil or environmental conditions.

For best results:

Fields should be clean-tilled and weed-free.

- Apply **Strongarm** as close as possible to planting.
- If irrigation is available, immediately apply 0.25 to 0.5 inch of water.
- Cultivation, a tank mixture, or applications of postemergence herbicides may also be needed to achieve desired level of control.

Application Directions

Preplant Incorporated Application

Apply Strongarm alone or in tank-mix combination with other herbicides registered for preplant incorporated application. Apply to a seedbed that is relatively free of clods. Incorporate the herbicide(s) into the top 1 to 3 inches of the final seedbed using equipment that provides thorough soil mixing. Do not apply Strongarm more than 4 weeks before planting. For optimum results, apply Strongarm at or just prior to planting. When Strongarm is applied in tank-mix combination with other herbicide(s), follow the incorporation directions for the tank-mix partner(s). Follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank-mixture.

Preplant Surface Application

Apply Strongarm alone or in tank-mix combination with other herbicides registered for preplant soil surface applications. Apply to a seedbed that is relatively free of clods. Do not apply Strongarm more than 4 weeks before planting. For optimum results, apply Strongarm at or just prior to planting. Soil surface applications are not effective until rainfall or irrigation of at least 0.25 - 0.5 inches has moved Strongarm into soil where weed germination occurs. If rainfall is not anticipated, shallow (i.e., 2 inches) incorporation prior to planting is

recommended to place Strongarm in contact with germinating weeds. If applied in tank-mix combination, follow use instructions, including application rates, precautions and restrictions of each product used in the tank-mixture. For minimum-tillage or no tillage or reduced tillage systems, when weeds are present at the time of application, apply in a tank mix combination a contact herbicide such as Starfire or Roundup herbicide.

Note: Reduced weed control in the planted row may occur from exposure of untreated soil during the planting operation if surface applications are not incorporated prior to planting.

Preemergence Application

Apply after planting but prior to crop or weed emergence. Preemergence applications are not effective until rainfall or irrigation of at least 0.25 - 0.5 inches has moved Strongarm into the soil where weed germination occurs. Strongarm may be applied alone or in tank-mix combination with herbicides registered for preemergence application. When applied in tank-mix combination, follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank-mixture. For optimum results, Strongarm should be applied at or near planting, prior to germination of weeds and emergence of the crop.

Minimum Tillage, No Tillage, Strip Tillage, or other reduced tillage systems

In these tillage systems, where peanuts are planted directly into a cover crop, stale seedbed, or previous crop residues, a contact herbicide such as Starfire or Roundup may be tank mixed with Strongarm to control existing weeds. Apply before, during (behind the planter), or after planting, but before the crop emerges.

Strongarm Followed by Postemergence Treatments

Weeds and grasses not controlled by Strongarm may be controlled with postemergence herbicide products. Follow the postemergence manufacturer's labels for application rates, weeds controlled, applicable use directions, precautions and limitations before use.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to the label instructions (including adverse conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by the buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract,

negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

*Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

Label Code: D02-044-003
Replaces LabeL D02-044-002

EPA-accepted 03-08-2000

Revisions:

1. Added Precautions for Avoiding Injury to Nontarget Plants.

Specimen Label Revised 12-06-00

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF WILLIAM D. SCHAFER

William D. Schafer, being duly sworn, deposes and states:

1. My name is William D. Schafer. I am an adult, over the age of 21 years and I am competent to testify as to all matters stated herein.

2. I am employed as Quality Coordinator **(job title)** for Dow AgroSciences LLC (hereinafter "Dow AgroSciences"). I am fully familiar with the facts and circumstances discussed herein and allege the same based on personal knowledge and on the records of Dow AgroSciences.

3. Strongarm* is the registered trademark for a herbicide developed, manufactured, and marketed by Dow AgroSciences.

4. Diclosulam is the active herbicidal ingredient in Strongarm herbicide.

5. The Strongarm herbicide sold within the United States by Dow AgroSciences is produced at a

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* Trademark of Dow AgroSciences LLC

manufacturing facility for which I am responsible, located in Midland, Michigan.

6. Dow AgroSciences maintains strict adherence to quality control measures at this manufacturing facility to assure that both the technical grade diclosulam used in its Strongarm and the end-use formulation of Strongarm, are produced in compliance with Dow AgroSciences' production specifications and the EPA-approved confidential statements of formula for these products.

7. These quality control measures require that each and every lot of technical grade diclosulam produced by Dow AgroSciences be separately tested, under laboratory conditions, to assure compliance with Dow AgroSciences' production specifications and the EPA-approved confidential statement of formula for technical grade diclosulam.

8. Similarly, these quality control measures require that each and every lot of each end use formulation of Strongarm herbicide produced by Dow AgroSciences also be separately tested, under laboratory conditions, to assure compliance with Dow AgroSciences' production specifications and the EPA-approved confidential statement of formula for that end use formulation.

9. No Strongarm herbicide manufactured by Dow AgroSciences may be sold or distributed by Dow AgroSciences unless it has first been established to have passed the aforementioned quality control tests.

10. Dow AgroSciences maintains retainer samples from each produced lot of diclosulam and end-use Strongarm herbicide for three (3) years plus the current year. If a particular lot number is identified, Dow AgroSciences can produce the retainer samples and demonstrate compliance with all production specifications and the EPA-approved confidential statement of formula for that product. The lot numbers are identified on each

container of each Strongarm herbicide sold or distributed by Dow AgroSciences.

11. The aforementioned quality control measures are currently in place and have been in place since 2000 when, upon information and belief, the herbicide application at issue in this lawsuit took place.

And further the affiant sayeth not.

/s/ William D. Schafer
William D. Schafer

[Notary Omitted]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

[Filed Apr. 2, 2002]

DEFENDANTS' MEMORANDUM IN OPPOSITION TO PLAINTIFF'S MOTION FOR SUMMARY JUDGMENT

Respectfully submitted,

PHIL WATKINS, P.C.
One Riverwalk Place, Suite 1750
700 N. St. Mary's Street
San Antonio, Texas 78205
Telephone: (210) 225-6666
Telecopier: (210) 225-2300

/s/ Phil Watkins
By: PHIL WATKINS
State Bar No. 20927400

JOHN E. SIMPSON, III
SPLAWN & SIMPSON, INC.
907 Texas Avenue
P.O. Box 1376
Lubbock, Texas 79408-1376
Telephone: (806) 765-8048
Telecopier: (806) 765-5308

ATTORNEYS FOR DEFENDANTS

[Text Omitted, Exhibits Excerpted]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF JOHN M. BROWN, Ph.D.

THE STATE OF TEXAS §
COUNTY OF BEXAR §

Before me, the undersigned notary public, on this day personally appeared JOHN M. BROWN, PH.D., who, after being on his oath duly sworn, deposed as follows:

1. My name is John M. Brown. I am over the age of 21 years and I am competent to make this affidavit. I have never been convicted of a felony and I have personal knowledge of the facts stated herein due to my education, training, experience and personal viewing. All of the facts stated in this affidavit are true and correct.

2. My address is 7900 O'Neal Road, Columbia, Missouri 65202. I have a Bachelor of Science in Agriculture Business from East Texas State University, a Masters of Science Degree in Floriculture from Texas A&M University and a Doctorate Degree in Horticulture from North Carolina State University. In my undergraduate and graduate education I took courses in

general horticulture, orchard management, plant physiology, plant nutrition, plant entomology and plant pathology. During the course of my graduate education, I conducted field investigations including the evaluation and analysis of herbicide damage upon plants under the direction of Dr. Ed McWilliams at Texas A&M University.

3. After receiving my doctorate degree in horticulture in 1987, I was employed with the University of Missouri and the Missouri Agricultural Extension Service. My duties included giving horticulture advise and assistance to farmers and growers. I taught courses on plant disorders to growers and performed on-site consultations with growers, chemical companies and the Missouri Agricultural Extension Service.

4. From January, 1989 to August, 1993, I was an assistant professor of horticulture in the Department of Plant Science at the University of Missouri-Columbia. My duties included working with the Agricultural Extension Service and working with the plant laboratory studying plant disorders. As a part of my study in the plant laboratory studying plant disorders, we evaluated and analyzed herbicide damage upon plants in a laboratory and farm setting. I also taught classes at the University of Missouri in Horticulture.

5. In September, 1993, I founded Agricultural Investigation and Research Corp. (AIR, Corp.). AIR, Corp. serves as a consultant in the investigation of plant disorders chiefly related to pesticide and herbicide damage. AIR, Corp. is located at 7900 O'Neal Road, Columbia, Missouri.

6. When asked to determine the causes of plant disorder in peanut crops, I have been taught in my undergraduate and graduate education to begin with the history of the peanut farms which includes oral information from the farm owner, manager and other persons who are familiar with the farm and the

accumulation of written information concerning the soils, irrigation water, horticulture practices, including fertilizer program, weed management program, pesticide program, fungicide program, general farm management and peanut production. After gathering this information, I conduct a visual inspection of the farm to observe any symptoms upon the peanut plants. The inspection of the peanut farm includes gathering peanut plants, soil and water for laboratory analysis, taking photographs and video of the farm, plants and farm operations. On the peanut plant itself, I will examine the leaves, stem, seed and roots. The investigation inspection methods which I have outlined above have been taught to me in the various horticulture courses that I have taken in my undergraduate and graduate education.

7. Based on my study of the Dow AgroSciences LLC herbicide Strongarm together with research that I have done with its label instructions together with my studies, I am familiar with®'s mode of action. The active ingredient in Strongarm is diclosulam. Diclosulam is a member of the Triazolopyrimidine sulfonanilide family of herbicides. The mode of action for diclosulam in plants is the inhibition of the enzyme acetolactate synthase (ALS). This enzyme catalyzes the first step in branch-chain (essential) amino acid biosynthesis. This pathway leads to the synthesis of valine, leucine and isoleucine and is unique in plants. Blocking this pathway deprives the plant of these essential amino acids, thus interferes with DNA synthesis and cell growth leading to plant destruction. ALS herbicides are absorbed by the roots, shoots and foliage and translocate throughout the plant in the xylem and phloem. ALS herbicides accumulate in the meristematic growing points of the plant such as the apical buds at the tips of roots, shoots, leaf axils and reproductive structures. Inhibition of plant growth will occur rapidly but visible symptoms of plant response may not show up for one to three weeks depending on the plant species, soil activity and environmental conditions.

8. Beginning in the spring of 2001, I was contacted by numerous farmers and peanut growers with complaints that their 2001 crops of wheat, corn and cotton were not growing in a normal fashion following the use of Strongarm in the growing year 2000 for peanuts. As I began to evaluate these complaints, the farmers and growers provided me with photographs, videotapes and verbal descriptions of the appearance of their 2000 peanut plants and crops. In addition, I visited Comanche Horizon Corporation's farm in Gaines and Andrews Counties and visited at least twenty farms in Oklahoma. The physical description of plant injury was similar in west Texas and in Oklahoma. The photographs and videotape taken of peanuts from various west Texas farms and Oklahoma farms were similar. The descriptions and physical appearance of injury to peanut plants included severe growth inhibition, crop yellowing (chlorosis), root injury, root necrosis (death), severe stunting of the plant throughout the growing season, failure of the peanuts to overlap in the rows and reduced yield and production.

9. Based on my research, typical soil and water pH in the peanut farming regions of west Texas is 7.0 and above. There is good scientific evidence which I believe to suggest that injury to the 2000 peanut crop resulted from high pH of the soil and irrigation water causing a greater availability of diclosulam in the plant-root environment.

10. As a research horticulturist one of the studies that we are taught to rely on is field research performed by agricultural extension services, county agents and university scientists, as well as scientific studies performed by the chemical manufacturer on its own product. One of the published abstracts which has appeared in scientific literature is entitled Effects of Strongarm Herbicide on Peanut Growth and Yield by J. R. Karnei, P. A. Dotray and J. W. Keeling, Texas Agricultural Experiment Station and Texas Tech University. This article was published in 2001 for research done on May 2,

2000 through harvest date November 15, 2000. This research found that in fourteen days after planting (DAP), Strongarm at 0.45 ounces per acre (oz/A) (label rate) applied preplant incorporated (PPI) or preemergence (PRE) caused injury at 28% and 40% rates. Strongarm showed injury to peanut plants at 11% preemergent and 22% preplant incorporated rates at 85 days after planting. Strongarm treatments at labeled rates for preplant incorporated showed a yield of 2,370 pounds/A as compared to the untreated acreage which yielded 3,090/A. In other words, Strongarm resulted in a 24% reduction in peanut production as compared to untreated tested acreage. The *Karnei* study concluded that Strongarm cannot be applied any earlier than five days after planting and cannot be used on soils with a pH of 7.2 or greater. Exhibit I-A. In most of the Defendant growers farms, the Strongarm was applied PPI in soil with a pH of 7.2 or greater which in my opinion caused injury to the peanuts and the growers production losses.

Another published study I rely on is Yellow Nutsedge *(Cyperus esculentus L.)* Management with Diclosulam and Metolachlor Combinations in Texas High Plains Peanut by B. L. Porter, P.A. Dotray, J. W. Keeling, and T. A. Baughman; Texas Tech University, Texas Agricultural Experiment Station, Lubbock, and Texas Cooperative Extension, Vernon. Porter, et. al. in 1999 and 2000 conducted experiments in the west Texas and found Diclosulam at labeled rates to cause injury that persisted at least 69 days after planting. The Strongarm was applied preemergent. Exhibit I-B.

Varietal Tolerance to Diclosulam and Flumioxazin in Texas Peanut by T. A. Murphree, P.A. Dotray, J. W. Keeling, B.L. Porter, T. A. Baughman, W. J. Grichar, R. G. Leon, Texas Tech University and Texas Agricultural Experiment Station, Lubbock; Texas Cooperative Extension Service, Vernon, Yoakum and College Station is a study which I rely on as a basis for my opinion.

Murphree, et. al. in 1999 and 2000 conducted experiments in west Texas and found diclosulam injury at labeled rates applied PRE. At 42 days after treatment some varieties showed as much as 45% injury. Exhibit I-C.

Another published study I rely on as a basis for my research is Weed Control and Peanut Response to Diclosulam by J. R. Karnei, P.A. Dotray, J. W. Keeling, and T. A. Baughman. Texas Tech University and Texas Agricultural Experiment Station, Lubbock, and Texas Cooperative Extension Service, Vernon. Karnei, et. al. conducted field studies in west Texas at six locations in 2000 and 2001 using both preplant incorporation (PPI) and preemergent application(PRE). Soil pH ranged from 7.6 to 8.2 and organic matter was less than 0.5% at all locations. It was concluded that PPI injured peanuts more than PRE and that PPI yield was less than PRE. Exhibit I-D.

Basically, there are 10 new restrictions in the 2001 supplemental label for Texas **that were not in the 2000 label** that would impact the use of Strongarm on all west Texas peanut operations. In fact, the new label recommendations would prevent most growers from using Strongarm. The most important is a recognition that Strongarm should not be applied on soils with a pH greater than 7.2. This would include most of west Texas peanut fields. West Texas farmers were not made aware of this precaution prior to their 2000 Strongarm applications. Since their soils are above a pH of 7.2 it can be concluded that unacceptable injury would have resulted from exposure to Strongarm. The other new label precautions are important in explaining why west Texas peanut crops were injured in 2000.

The second major label change was the elimination of Pre-Plant Incorporation PPI and more strict application recommendations on preemergence PRE applications that read: "Apply Strongarm at the rate of 0.45 oz as a preemergence application from no less than 5 days after

planting through "at cracking." Many of the west Texas farms reported peanut injury with preplant incorporation.

Exhibit 7 is a true copy of the year 2000 label from the Strongarm used by Defendant growers.

Exhibit 8 is a true copy of the year 2001 label with the significant changes highlighted.

Dow AgroSciences LLC scientific employee John M. Zabik published a report entitled Terrestrial Field Dissipation of Diclosulam at Four Sites in the United States which discusses the mobility of diclosulam in various types of soils as it is related to soil pH and other soil factors. Exhibit 9 is a true and correct copy of this published report which appeared in the Journal of Agricultural Food Chemistry, 2001, Volume 41, pages 3284-3290. I rely on this published study to show that Dow AgroSciences LLC scientists who were studying diclosulam were familiar with the effect of soil pH on diclosulam.

Another published study on which I rely is Exhibit 10, Degradation of a Sulfonamide Herbicide as a Function of Soil Sorption, Weed Research, 1992, Volume 32, pages 197-205 authored by R. G. Lehmann, J. R. Miller, D. D. Fontaine, D. A. Laskowski, J. H. Hunter and R. C. Cordes, each of whom were employed as scientists by Dow Elanco, Indianapolis, Indiana demonstrates that Dow AgroSciences LLC scientist were aware and had studied the effects of soil sorption as it relates to soil pH for sulfonamide herbicides (the same family as diclosulam/Strongarm). Their basic finding was that the higher soil pH, the more available the herbicide was to the plant. Dow AgroSciences LLC's sales representatives misrepresented the characteristics, uses or benefits of Strongarm by stating that it was a good, superior or excellent herbicide for use in west Texas peanut fields when Dow AgroSciences LLC's own scientist were aware of the increased herbicidal activity Strongarm has in the

presence of pH soils of 7.0 or greater which are the soil types in each of the Defendant growers peanut fields.

CONCLUSIONS

Based upon my review of the scientific literature Exhibits l-A, l-B, 1-C, 1-D together with my review of Dow AgroSciences LLC 2000 label for Strongarm Exhibit 7 and 2001 Supplemental Label for Strongarm Exhibit 8 together with my education, training and experience in the mode of action of herbicides and my review of the photographs and videotape of the Defendant growers peanut plants in the year 2000 and my understanding of the soil pH in the Defendant growers' peanut fields being a pH of 7.0 or greater, including the published studies in Exhibit 9 and Exhibit 10, I have the following opinions:

It is my opinion that it was negligence for Dow AgroSciences LLC to develop, test, manufacture, produce, and promote Strongarm for use in west Texas to the Defendant growers in the year 2000 because of the increased herbicidal activity Strongarm has in the presence of pH soils of 7.0 or greater which are in each of the Defendant growers peanut fields.

It is my opinion that Strongarm was not reasonably fit as a peanut crop herbicide in west Texas because of the increased herbicidal activity Strongarm has in the presence of pH soils of 7.0 or greater which are the soil types in each of the Defendant growers peanut fields.

It is my opinion that Strongarm was not merchantable as a peanut crop herbicide in west Texas because of the increased herbicidal activity Strongarm has in the present of pH soils of 7.0 or greater which are the soil types in each of the Defendant growers peanut fields.

It is my opinion that Dow AgroSciences LLC's sales representatives misrepresented the characteristics, uses or benefits of Strongarm by stating that it was a good, superior or excellent herbicide for use in west Texas

peanut fields when Dow AgroSciences LLC's own scientists were aware of the increased herbicidal activity Strongarm has in the presence of pH soils of 7.0 or greater which are the soil types in each of the Defendant growers peanut fields as demonstrated in Exhibits 9 and 10.

It is also my opinion that when Dow AgroSciences LLC's representatives states that Strongarm was a good, superior or excellent herbicide for use in west Texas peanut fields that this was a misrepresentation of the particular standard, quality or grade of Strongarm because of the increased herbicidal activity Strongarm has in the presence of pH soils of 7.0 or greater which are the types of soils on each of the Defendant growers peanut fields.

It is my opinion that Strongarm was defective as a herbicide for use in west Texas peanut fields with a soil pH of 7.0 or greater and that the defect in the product rendered the herbicide unreasonably dangerous and was producing cause of damages to each of the peanut growers because of the increased herbicidal activity Strongarm has in the presence of pH soils of 7.0 or greater which are in each of the Defendant growers' peanut fields.

It is my opinion that any statement made by Dow AgroSciences LLC or its sales representatives to the effect that Strongarm was a good, superior or excellent herbicide for use in west Texas peanut fields was a misrepresentation about Strongarm because of the increased herbicidal activity Strongarm has in the presence of pH soils of 7.0 or greater which will cause injury to peanut plants.

It is my opinion as a plant horticulturist that the use of Strongarm in the year 2000 in the west Texas peanut crops of the Defendant growers resulted in plant injury due to delayed crop development resulting in lost yield and production. Scientific studies including Exhibits 1-A through 1-D and Exhibit 9 and 10 have illustrated

problems with Strongarm each associated with a soil pH of 7.0 or greater. Over 100 farms experienced plant injury from using Strongarm in the 2000 growing season with symptoms of plant stunting, growth delay, yellowing and late maturity to harvest with reduced yield in production. Dow AgroSciences LLC recognized these growth problems and changed the Strongarm specimen, label Exhibit 8, for the year 2001 which is, in my opinion, a recognition on Dow AgroSciences LLC's part of the injury pattern to peanut growers in west Texas. Strongarm caused residual injury and damage in the year 2000 to wheat and cotton grown on land which was treated with Strongarm in the year 2000 due the herbicide carryover effect.

Further Affiant sayeth naught."

/s/ John M. Brown

JOHN M. BROWN, PH.D.

[Notary Omitted]

TITLE: Effects of Strongarm Herbicide on peanut growth and yield.

AUTHORS: J.R. Karnei, P.A. Dotray, J.W. Keeling, Graduate Research Assistant, Associate Professor, Professor

METHODS AND MATERIALS:

Variety: Flavor Runner 458

Plot size: 4 rows by 50', 3 replications

Soil type: Amarillo fine sandy loam

O.M.: 0.7%
Sand: 73%
Silt : 10%
Clay : 17%
pH : 7.6
CEC: 10.1

Planting date: May 2, 2000

Digging date: October 23, 2000

Harvest date: November 15, 2000

Irrigation: LEPA - season total 23.25 inches

Application dates:

Springtooth harrow – prior to listing	March 29
Preemergence	May 2
Postemergence	May 24

RESULTS AND DISCUSSION:

Strongarm is a new herbicide that was registered in peanut in 2000. Previous research has shown that Strongarm controls pigweed, devil's-claw, and morningglory species.

Peanut growth and yield response to Strongarm was evaluated at Ag Cares in Lamesa, TX in 2000. Strongarm was applied preplant incorporated (PPI) and preemergence (PRE) at 0.30 (2/3X), 0.45 (1X), and 0.90 (2X) oz/A. Cadre, Valor, and an untreated check were used for comparison. All plots were kept weed-free season long. At 14 days after planting (DAP), Strongarm at 1X

applied PPI or PRE injured peanut 28%, Strongarm at 2/3X PPI or PRE injured peanut 10-12%, and Strongarm at 2X applied PPI or PRE injured peanut 50%. No peanut injury was observed from Valor PRE at 3 oz/A. Strongarm at 1X injured peanut 11% PRE and 22% PPI at 85 DAP. Strongarm at 2/3X rate applied PRE and PPI injured peanut 3% and 12%, respectively at 85 DAP. Strongarm at 2X injured peanut 35% PRE and 45% PPI and Cadre injured peanut 7% 85 DAP. At the end of the season, 8 to 10% peanut injury was observed from Strongarm at the 2X rate. All other Strongarm treatments had <3% injury at the end of season. Strongarm applied PPI decreased yield 680 to 1350 lb/A compared to the non-treated plot. Less injury was observed from Strongarm PRE at 1X and 2X. Because of the injury concern, the Strongarm label has been changed for 2001, Strongarm cannot be applied any earlier than 5 days after planting, and cannot be used on soils with a pH of 7.2 or greater.

Table 1. Peanut growth and yield as affected by Strongarm treatment.

Treatment Name	Rate oz/A	Application Method	Peanut Injury (%) May 16	June 21	July 26	Sept. 8	Peanut Yield (lb/A) 2000
Strongarm	0.30	PPI	13 c	33 c	12 d	0 c	2410 b
Strongarm	0.45	PPI	28 b	40 b	22 c	3 b	2370 b
Strongarm	0.90	PPI	48 a	53 a	44 a	11a	1740 c
Strongarm	0.30	PE	10 c	22 d	3 ef	2 bc	2150 bc
Strongarm	0.45	PE	27 b	27 d	11 d	2 bc	2640 ab
Strongarm	0.90	PE	50 a	45 b	35 b	8 a	2260 bc
Cadre	1.44	PT	0 d	12 e	8 de	4 b	2430 b
COC	%v/v	PT					
Valor	3.00	PE	0 d	0 f	0 f	0 c	3070 a

YELLOW NUTSEDGE (*Cyperus esculentus* L.) MANAGEMENT WITH DICLOSULAM AND METOLACHLOR COMBINATIONS IN TEXAS HIGH PLAINS PEANUT. B.L. PORTER, P.A. DOTRAY, J.W. KEELING, and T.A. BAUGHMAN; Texas Tech University, Texas Agricultural Experiment Station, Lubbock, and Texas Cooperative Extension, Vernon.

ABSTRACT

Yellow nutsedge (*Cyperus esculentus* L.) infests numerous acres on the Texas Southern High Plains. Metolachlor has been used to control yellow nutsedge in peanut for several years. Due to concern about potential injury from preplant incorporated and preemergence applications, many growers apply metolachlor early postemergence. Experiments were conducted in 1999 and 2000 to evaluate yellow nutsedge control with dicolosulam applied PRE at four rates (0, 0.008, 0.016, and 0.024 pounds (active ingredient) per acre), metolachlor applied postemergence (POST) at four rates (0, 0.5, 1.0, and 1.3 pounds per acre), and combinations of these herbicides. Florunner peanut was planted in 2000 in a producer's field near Denver City, TX, and FlavorRunner 458 peanut was planted in a producer's field near Seminole TX in 2001 in areas heavily infested with yellow nutsedge. Applications were made using a tractor mounted compressed air sprayer that delivered 10 gallons per acre at 24 psi. Yellow nutsedge control and peanut injury was evaluated 31, 53 and 71 days after planting (DAP) in 2000 and 40, 55, and 69 DAP in 2001. Yellow nutsedge densities were counted at season's end and plots were harvested with a plot combine. Data was subjected to an analysis of variance with partitioning appropriate for a factorial arrangement. Means were separated using Fisher's Protected LSD at 0.05.

Diclosulam at 0.008, 0.016, and 0.024 lbs/A PRE controlled yellow nutsedge 47%, 62%, and 78% (71 DAP) in 2000. Metolachlor at 0.5, 1.0, and 1.3 lbs/A POST

controlled yellow nutsedge 15%, 38%, and 52% (71 DAP). A diclosulam by metolachlor interaction was observed 71 DAP. When diclosulam was applied at 0.008 lbs/A PRE, additional applications of metolachlor POST did not provide acceptable yellow nutsedge control 71 DAP. When diclosulam was applied at 0.016 lbs/A PRE, metolachlor at 1.3 lbs/A POST improved yellow nutsedge control to 88%. This control was better than metolachlor at 0.5 or 1.0 lbs/A POST, and equivalent to diclosulam 0.024 lbs/A PRE with any rate of metolachlor POST. When diclosulam was applied at 0.024 lbs/A PRE, all metolachlor POST rates provided equivalent control of yellow nutsedge (85 to 88%). End of season yellow nutsedge density was similar across herbicide combinations, with plots averaging from 0.4 to 2.5 yellow nutsedge plants per foot.[2] Untreated plots averaged 17.9 plants per foot. Metolachlor POST did not injure peanut. Diclosulam at 0.008 lbs/A injured peanut 4% 31 DAP, but no injury was observed 53 DAP in 2000. Diclosulam at 0.016 lbs/A injured peanut 11% at 31 DAP, but injury decreased to 4% at 71 DAP. Similar injury was observed from diclosulam at 0.024 lbs/A (16% at 31 DAP and 6% at 71 DAP). No injury was observed at harvest, and neither grade nor yield was affected by any herbicide treatment. Yields averaged 1,532 lbs/A.

Diclosulam at all rates controlled yellow nutsedge greater than 90% 40 and 55 DAP in 2001, but control dropped to less than 75% 69 DAP. Metolachlor at 1.0 and 1.3 lbs/A controlled yellow nutsedge greater than 75% 55 and 69 DAP. A diclosulam by metolachlor interactions was observed 69 DAP. All herbicide combinations provided acceptable control of yellow nutsedge. When diclosulam was applied at 0.008 lbs/A, metolachlor at 1.3 lbs/A controlled yellow nutsedge 95%. This control was similar to the yellow nutsedge control provided by the highest herbicide-rate combinations. When metolachlor was applied at 1.3 lbs/A, all rates of diclosulam controlled yellow nutsedge more effectively than metolachlor at 0.5 lbs/A. End of season yellow nutsedge density was similar

across herbicide combinations, with plots averaging from 0.2 to 1.6 yellow nutsedge plants per foot[2]. Untreated plots averaged 6.8 plants per foot. Metolachlor POST did not injure peanut. Diclosulam at 0.008 lbs/A did not injure peanut in 2001. Diclosulam at 0.016 lbs/A injured peanut 4% (40 DAP), and injury persisted at 69 DAP. Similar injury was observed from diclosulam at 0.024 lbs/A (12% at 40 DAP and 12% at 69 DAP). No injury was observed at harvest, and neither grade nor yield was affected by any herbicide treatment. Yields averaged 4,857 lbs/A.

VARIETAL TOLERANCE TO DICLOSULAM AND FLUMIOXAZIN IN TEXAS PEANUT

T.A. Murphree, P.A. Dotray, J.W. Keeling, B.L. Porter, T.A. Baughman, W.J. Grichar, R.G. Lemon Texas Tech University and Texas Agricultural Experiment Station, Lubbock; Texas Cooperative Extension Service, Vernon, Yoakum, and College Station

ABSTRACT

Diclosulam and flumioxazin have been reported to have broad-spectrum broadleaf weed control when applied preemergence (PRE), but some peanut injury has been observed. Peanut injury on the Texas Southern High Plains was first observed following excessive rates of diclosulam (0.048 lb/A). In 1999 injury was also observed at the 0.024 lb ai/a applied PRE, but no injury was apparent by the end of season (Karnei et al. 2000). Due to injury in 2000 from diclosulam, a peanut variety trial was conducted in Gaines County to test peanut varietal tolerance to diclosulam and flumioxazin. In addition, diclosulam application timing was also investigated. Four high oleic peanut lines: Flavor Runner 458 Sunoleic 97R, TX 977006, Georgia Hi O/L and one conventional variety, Tamrun 96, were used in this study.

Treatments were replicated three times in a split-plot design. Plot size was 7 by 30 ft. Diclosulam was applied at two rates, 0.016 and 0.024 lb ai/A, both PRE and postemergence (POST). Flumioxazin was applied PRE at 0.063 and 0.094 lb/A. Peanuts were planted and PRE treatments were applied May 15, while POST treatments were applied June 12. All treatments were applied using a CO2 backpack sprayer calibrated to deliver 10 GPA. Evaluations were made on PRE treatments 14, 42, and 118 days after treatment (DAT) while POST treatments were evaluated 14, 58 and 90 DAT. Peanut grades and yields were determined at the end of the season.

At 14 DAT diclosulam applied PRE at 0.016 and 0.024 lb ai/A injured peanut 10 to 40% in all varieties except Tamrun 96. At 42 DAT, diclosulam PRE injured Flavor Runner 458 and the Sunoleic 97R 20 to 25% while injury to Georgia Hi O/L from diclosulam at 0.024 lb ai/A was 35 to 45%. At 118 DAT, all injury decreased to < 5% and yield was not affected by diclosulam PRE. Less than 5% peanut injury was observed on all varieties from flumioxazin applied PRE at 14 DAT. No injury was observed at 42 and 118 DAT and yield was not affected by any flumioxazin treatment. At 14 DAT, diclosulam applied POST at both rates injured peanut < 5% in all varieties and no injury was observed 90 DAT. Yield was not affected by diclosulam (POST).

At the South Texas location in Yoakum, no peanut response was observed following any treatment of diclosulam and flumioxazin applied PRE. When flumioxazin was applied PRE at the Rolling Plains location in Motley County, no injury was observed to any variety, at any rate, throughout the growing season and yield was not reduced.

Future studies will be conducted to evaluate diclosulam POST and to examine factors contributing to injury caused by diclosulam and flumioxazin PRE.

WEED CONTROL AND PEANUT RESPONSE TO DICLOSULAM. J.R. Karnei, P.A. Dotray, J.W. Keeling, and T.A. Baughman. Texas Tech University and Texas Agricultural Experiment Station, Lubbock, and Texas Cooperative Extension Service, Vernon.

ABSTRACT

Field studies were conducted in West Texas at six locations in 2000 and 2001 to evaluate weed control and peanut (*Arachis hypogaea*) response to diclosulam applied preplant incorporated (PPI) and preemergence (PRE). All plots received a PPI treatment of ethalfluralin at 0.75 lb ai/A or pendimethalin at 0.50 to 0.75 lb ai/A for Palmer amaranth (*Amaranthus palmeri*) control. Diclosulam was applied PPI and PRE at 0.016 (2/3x), 0.024 (1x), and 0.048 (2x) lb ai/A. Other treatments included imazapic postemergence (POST) at 0.063 lb ai/A, flumioxazin PRE at 0.094 lb ai/A, and a non-treated check.

Weed control studies were conducted in Brownfield in 2000 and Lamesa in 2001. Diclosulam at 0.024 lb controlled purple nutsedge (*Cyperus rotundus*) 60 to 70% in 2000 and 50 to 60% (late-season) in 2001. Ivyleaf morningglory (*Ipomoea hederacea*) was controlled 60 to 70% when diclosulam was applied PPI or PRE at 0.024 lb in 2000. In 2001, diclosulam applied PPI or PRE controlled Ivyleaf morningglory > 85% early-season, and at 124 days after planting (DAP), diclosulam at 0.024 lb provided 80% (PRE) and 40% (PPI) control. Control of both weed species with diclosulam increased as rate increased for both PPI and PRE applications.

Peanut tolerance trials were conducted in Lamesa in 2000 and 2001 and in Seminole in 2001. All plots were kept weed-free throughout the season. Soil pH ranged from 7.6 to 8.2 and organic matter was less than 0.5% at all locations. At 14 DAP, diclosulam at 0.024 lb injured peanut 28 to 30% (PPI) and 17 to 27% (PRE) in both years. Diclosulam at 0.048 lb injured peanut 40 to 50%

regardless of application. Diclosulam at 0.024 lb applied PPI or PRE injured peanut less than 8% late-season. In 2000 and 2001, plots treated with diclosulam at 0.048 lb PPI produced the lowest yields. Plots treated with diclosulam at 0.024 lb PPI yielded less than plots treated with diclosulam at 0.024 lb PRE in both years. Peanut grade was not affected by any treatment when compared to the non-treated check. At Seminole, injury was less than injury observed at Lamesa early-season, and less than 10% injury was observed late-season. No differences were observed in yield or grade at Seminole.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF TODD DENMAN

THE STATE OF TEXAS §

COUNTY OF COMANCHE §

Before me, the undersigned authority, on this day personally appeared TODD DENMAN, as Partner and Personal Representative of the Estate of Burk Denman, who being first duly sworn, made the following declaration based on personal knowledge under oath:

"I was a partner with and am now the Personal Representative of the Estate of Burk Denman, a peanut farmer in Comanche County, Texas. My father, Burk Denman, was named as a Defendant in the above referenced lawsuit. Before his death on January 6, 2002, my father and I had been partners in our peanut business for many years. After applying Strongarm® herbicide in May 13, 2000, I saw that the peanut plants which were treated with Strongarm® were not growing normally, were stunted in their growth, and were not developing foliage. As a farmer for over 20 years, I recognized each of these

growth problems as a symptom of herbicide injury. The only herbicide we had used was Strongarm®. Because of each of these growth problems, the peanut crop was significantly delayed in maturity for harvest, far beyond normal maturity. The delay in maturity caused us to incur additional crop expense in producing and harvesting the peanuts and we experienced a significant reduction in harvest profit for the year 2000. In July 2000, we contacted Ralph Porter, the area representative for Dow AgroSciences LLC, and notified him about the herbicide injury to our 2000 peanut crop. Mr. Porter, the Dow AgroSciences LLC area representative, told us that he would come out and inspect our peanuts, which he did, and he said that regardless of the outcome we needed to grow out the peanut crop to harvest. Mr. Porter went on to say that Dow would make up any loss of production to us after harvest if we would grow the crop to harvest. We relied on his representation and grew the crop to harvest. We received a letter from Greg Fletcher, Product Marketing Manager of Dow AgroSciences LLC. The letter is attached as Exhibit A to this affidavit. We did everything that Dow AgroSciences LLC asked us to do in Exhibit A and Dow AgroSciences LLC has not paid us for our year 2000 production loss as they promised to do. We relied on Dow AgroSciences LLC's representations and promises made by Mr. Porter and Greg Fletcher in Exhibit A. Because we relied on Dow AgroSciences LLC's representations and promises, my father and I spent substantial additional money for additional chemical inputs, water, labor, electricity and equipment time in growing the crop to harvest that we would not have spent except for the representations and promises of Dow AgroSciences LLC, which we relied on, that they would pay us for the loss of production that we had for the 2000 crop. The Strongarm® was defective as a herbicide and did not perform as a herbicide should which caused injury and money damages to the peanut crop.

When we purchased the Strongarm®, the package insert with all the information about the product was sealed in plastic and could not be opened until after the Strongarm® was purchased. After purchasing the Strongarm® I opened the sealed package insert to read the application instructions. I read the package insert and did not see any written information about risks of using Strongarm® or limitations of claims against Dow AgroSciences LLC if the Strongarm® did not perform or caused crop injury. After we used the Strongarm® and it had caused noticeable crop injury, I read the package insert again. The package insert is Exhibit B attached to this affidavit. On this reading I noticed for the first time the paragraph entitled Inherent Risks of Use on page 10 of the package insert and the paragraph entitled Limitations of Remedies on page 11. The package insert is numbered page 1 through 11 with an unnumbered first page. The one paragraph of information on page 10 entitled Inherent Risks of Use is not conspicuous because the print is the smallest print on the page, the print is all the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason that I did not see and appreciate the paragraph entitled Inherent Risks of Use is because the paragraph as on page 10 of the package insert because the print is the smallest because the print size on the page and in the entire package insert, because the print is all the same small size without any bold letters or capital letters or in different colors.

The one paragraph of information on page 11 entitled Limitations of Remedies is not conspicuous because the print is all the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason that I did not see and appreciate the paragraph entitled Limitations of Remedies is because the paragraph was on page 11 of the package insert because the print is the smallest print size on the page and in the entire package insert, because the print is all the same

small size without any bold letters or capital letters or in different colors.

I do not know what the package insert meant when it stated that Dow AgroSciences LLC is not liable for consequential or incidental damages or losses. The terms consequential or incidental damages or losses were not defined in the package insert Exhibit B.

My lawyer tells me that the legal definition of consequential damages is "*Such damage, loss or injury as does not flow directly and immediately from the act of the party, but only from some of the consequences or results of such act. Damages which arise from intervention of special circumstances not ordinarily predictable. Those losses or injuries which are a result of an act but are not direct and immediate. Consequential damages resulting from a seller's breach of contract include any loss resulting from general or particular requirements and needs of which the seller at the time of contracting had reason to know and which could not reasonably be prevented by cover or otherwise, and injury to person or property proximately resulting from any breach of warranty.* U.C.C. § 2-715(2)." (Black's Law Dictionary, Sixth Edition).

My lawyer tells me that the legal definition of incidental damages is *"Under U.C.C. § 2-710, such damages include any commercially reasonable charges, expenses or commissions incurred in stopping delivery, in the transportation, care and custody of goods after the buyer's breach, in connection with the return or resale of the goods otherwise resulting from the breach. Also, such damages, resulting from a seller's breach of contract, include expenses reasonably incurred in inspection, receipt, transportation and care and custody of goods rightfully rejected, any commercially reasonable charges, expenses or commissions in connection with effecting cover and any other reasonable expense incident to the delay or other breach.* U.C.C. § 2-715(1)." (Black's Law Dictionary, Sixth Edition).

If I had known that Dow AgroSciences LLC was saying it would not pay me for all my expenses and lost profit if the Strongarm® caused injury to my peanut crop, I would not have bought or used the Strongarm® on my peanut crop in 2000.

My father and I used Strongarm® on our peanuts in 2000 after it was recommended to us by our local chemical distributor and the local Dow AgroSciences LLC representative.

Further Affiant sayeth naught."

/s/ Todd Denman

TODD DENMAN, Partner and
Personal Representative of the
Estate of Burk Denman

[Notary Omitted]

[Exhibit A]

Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

[Company Logo Omitted]

December 5, 2000
Mr. Burk Denman
Route 1 Box 71
Carlton, TX 76442

In response to your concerns regarding potential effects of Strongarm* herbicide on your 2000 peanut crop, Dow AgroSciences initiated an effort to evaluate and understand the issues affecting the current production season in the southwest. In trying to determine why peanut yield reductions occurred in the southwest this year, Dow AgroSciences is reviewing and considering, among other things, the use of Strongarm herbicide, plant disease and physiology, weather, soil, water quality and quantity, weed control, crop condition at harvest, and post-digging conditions.

In that connection, Dow AgroSciences has retained the services of Rush, Marcroft and Associates, a group of independent agricultural consultants specializing in crop loss evaluations. Dale Rush, Ph.D., along with Ed Sieckert, M.S. and Neil Phillips, Sr., have agreed to serve as neutral, third-party mediators to work to facilitate fair and mutually-agreeable resolutions of lost yield claims. They have also agreed to evaluate the agronomic issues for each field/circle and to provide an economic analysis after considering the contribution of all relevant factors to yield reduction, if any occurred.

In this capacity, Dr. Rush and associates have agreed to try to negotiate a mutually agreeable settlement between you and Dow AgroSciences. The mediation process is not binding on either you or Dow AgroSciences unless a

settlement agreement is reached. If Dr. Rush and associates are able to work with you and Dow AgroSciences to achieve an acceptable settlement, then you will be asked to sign a settlement agreement recognizing that all of your 2000 peanut crop claims against Dow AgroSciences have been settled. If Dr. Rush and his associates are not able to work out a settlement to which both you and Dow AgroSciences agree, then you are free to pursue any and all other legal remedies available to you if you wish to do so.

If you wish to participate in the claim evaluation and mediation process, you must do two things:

(1) Complete and return the enclosed questionnaire to Dr. Rush, along with other documentation requested; and

(2) Sign the bottom of this letter and return a copy of it to Dr. Rush.

Signing the bottom of this letter and returning it to Dr. Rush signifies that you have read about the mediation process, that you understand how it will work, and that you agree to participate in the mediation process as explained in this letter.

In addition to the questionnaire, Dr. Rush would also find helpful any documents you can give him to help assess yield and quality factors so as to allow comparison with your peanut production history. Because the effects of prolonged drought conditions contributed to yield reductions associated with temperature stress, irrigation water quality, quantity, and soil salinity, Dr. Rush would like to have historical irrigation data including power utility records for the specific locations, in order to compare irrigation requirements where you have grown peanuts in the recent past.

Dow AgroSciences plans to review all claims, including yours, submitted in connection with crop losses allegedly

caused by Strongarm during the 2000 growing season. However, please be advised that the label for Strongarm specifically provides that Dow AgroSciences is not liable for "losses or damages resulting from handling or use" of Strongarm unless Dow AgroSciences has been "promptly notified" of such loss or damage. Dow AgroSciences insists upon prompt notice of loss or damage claims so that it is able to properly investigate and evaluate product performance, and to isolate causative factors in order to provide timely assistance and corrective recommendations.

Once you return the questionnaire, your signed copy of this letter, and any other documents listed above, Dr. Rush and associates will begin reviewing your information along with the data Dow AgroSciences already has collected during the 2000 growing season. They will then work with both you and Dow AgroSciences in an effort to settle your claims.

A pre-addressed envelope is included to aid in returning the necessary information. Please keep copies of all submitted information for you own records. Please return the information requested no later than **December 23, 2000**.

If you have contacted or decide to contact a lawyer in connection with your claim against Dow AgroSciences, please forward this letter to your lawyer immediately. You are free to participate in the mediation process even if you have a lawyer, but please be advised that your lawyer will need to facilitate any and all future contacts and communication with Dow AgroSciences.

Thank you for your cooperation in this matter.

/s/ Greg Fletcher
Greg Fletcher
Product Marketing Manager

Mail to:
Dale W. Rush, Ph.D.
Rush, Marcroft and Associates
28951 Falcon Ridge Road
Salinas, CA 93908

/s/ Burk Denman
Grower Signature

12/20/00
Date

[Exhibit B reproduced at pp. 165-178, *infra*]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF NEIL FRIESEN

THE STATE OF TEXAS §
COUNTY OF GAINES §

Before me, the undersigned authority, on this day personally appeared NEIL FRIESEN, who being first duly sworn, made the following declaration under oath:

"My name is Niel Friesen. I am an adult, over the age of 21 years and I am competent to testify as to all matters stated herein.

I am a farmer and I am one of the Defendants in the above styled and numbered lawsuit.

I am familiar with the facts and circumstances discussed herein and make the following declaration based on personal knowledge.

I attended a Field Day in 1999 sponsored by an area chemical company concerning Strongarm® herbicide. We were told that Strongarm® was an excellent herbicide to use for weed control on West Texas peanuts. We were told that Strongarm® could be applied at planting time by

incorporating Strongarm® into the soil with the peanut seed. I relied upon the representations about Strongarm® which I heard at the Field Day.

After applying Strongarm® herbicide, I noticed that the peanut plants which were treated with Strongarm® were not growing normally, were stunted in their growth, were yellowed and discolored and were not developing foliage. I also noted that the peanut plants did not have feeder roots. As a farmer, I recognize each of these growth problems as a symptom of herbicide injury. The only herbicide that I had used on these peanuts was Strongarm®. Because of these growth problems, the peanut crop was significantly delayed in maturity for harvest, far beyond normal maturity. The delay in maturity caused me to incur additional crop expense in producing and harvesting the peanuts and I experienced a significant reduction in harvest profit for the year 2000.

On or about July, 2000, I called Robert Armstrong, sales manager at Agriplex West, my chemical distributor and local representative for Dow AgroSciences, L.L.C., and notified him about the injury to my 2000 peanut crop. Gregg Alpers, area representative for Dow AgroSciences, L.L.C., told me that he would come out and inspect my peanuts and that regardless of the outcome I needed to grow out the peanut crop to harvest. Mr. Alpers went on to say that Dow would make up any loss of production to me after harvest.

I used Strongarm® on my peanuts in 2000 after it was recommended to me by my local chemical distributor and the local Dow AgroSciences, L.L.C. representative.

When I purchased the Strongarm®, the package insert with all the information about the product was sealed in plastic and could not be opened until after the Strongarm® was purchased. After purchasing the Strongarm®, I opened the sealed package insert to read the application instructions. I read the package insert

about the application instructions and did not see any written information about the risks of using Strongarm® or limitations of claims against Dow Agrosciences if the Strongarm® did not perform or cause crop injury. After I used the Strongarm®, I noticed considerable crop injury and I read the package insert again. The package insert is Exhibit "1" attached to this Affidavit. On this reading, I noticed for the first time the paragraph entitled "Inherent Risks of Use" on page 10 of the package insert and the paragraph entitled "Limitations of Remedies" on page 11. The package insert is 4.5 inches by 4.5 inches and is numbered page 1 through page 11 with an unnumbered first page. The one paragraph with information on page 10 entitled "Inherent Risks of Use" is not conspicuous to me because the print is the smallest print on the page, all of the print is the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason I did not see the paragraph entitled "Inherent Risks of Use" is because the paragraph was on page 10 of the package insert and because the print is the smallest print size on the page and in the entire package insert and because the print is the same small size without any bold letters or capital letters or in different colors.

The one paragraph of information on page 11 entitled "Limitations of Remedies" is not conspicuous because the print is all the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason I did not see and appreciate the paragraph entitled "Limitations of Remedies" is because the paragraph was on page 11, which was the last page of the package insert, because the print is the smallest print size on the page and in the entire package insert, and because the print is all the same small size without any bold letters or capital letters or in different colors.

Further, My lawyer tells me that the legal definition of consequential damages is "*Such damage, loss or injury*

as does not flow directly and immediately from the act of the party, but only from some of the consequences or results of such act. Damages which arise from intervention of special circumstances not ordinarily predictable. Those losses or injuries which are a result of an act but are not direct and immediate. Consequential damages resulting from a seller's breach of contract include any loss resulting from general or particular requirements and needs of which the seller at the time of contracting had reason to know and which could not reasonably be prevented by cover or otherwise, and injury to person property proximately resulting from any breach of warranty. U.C.C.§ 2-715(2)." (Black's Law Dictionary, Sixth Edition).

My lawyer tells me that the legal definition of incidental damages is "*Under U.C.C. § 2-710, such damages including any commercially reasonable charge, expenses or commissions incurred in stopping delivery, in the transportation, care and custody of goods after the buyer's breach, in connection with the return or resale of the goods otherwise resulting from the breach. Also, such damages, resulting from a seller's breach of contract, include expenses reasonably incurred in inspection, receipt, transportation and care and custody of goods rightfully rejected, any commercially reasonable charges, expenses or commissions in connection with effecting cover and any other reasonable expense incident to the delay or other breach.* U.C.C. § 2-715(1)." (Black's Law Dictionary, Sixth Edition).

If I had know that Dow Agrosciences in the package insert was saying it would not pay me for all of my expenses and any loss profit if the Strongarm® caused injury to my peanut crop, I would not have bought or used the Strongarm® on my peanut crop in 2000.

FURTHER AFFIANT SAYETH NOT."

Witness my hand this 1st day of April, 2002.

/s/ Neil Friesen
NEIL FRIESEN

[Notary Omitted]

[Exhibit 1 reproduced at pp. 165-178, *infra*]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF THOMAS R. FUSTON

STATE OF §

COUNTY OF HALL §

On this day appeared **THOMAS R. FUSTON**, being duly sworn, stated on his oath as follows:

My name is Thomas R. Fuston. I am an adult, over the age of 21 years and I am competent to testify as to all matters stated herein.

I am a farmer and I am one of the Defendants in the above styled and numbered lawsuit.

I am familiar with the facts and circumstances discussed herein and make the following declaration based on personal knowledge.

In the year 2000, I attended a grower's meeting sponsored by Valley Peanut Growers and Dow Agrosciences, LLC concerning Strongarm® herbicide. The Dow representative said that Strongarm® was an excellent herbicide to use in West Texas soil for peanuts and weed control. He said that Strongarm® was less

expensive than Cadre which was another herbicide that many of the growers had been using. He said that Strongarm® could be applied at planting time by incorporating Strongarm® into the soil with the peanut seed. After listening to what he said, I relied on his representations about Strongarm® and purchased and applied the Strongarm®.

After applying Strongarm® herbicide, I noticed that the peanut plants which were treated with Strongarm® were not growing normally, were stunted in their growth, were yellowed and discolored and were not developing foliage. I also noted that the peanut plants did not have feeder roots. As a farmer, I recognize each of these growth problems as a symptom of herbicide injury. The only herbicide that I had used on these peanuts was Strongarm®. Because of these growth problems, the peanut crop was significantly delayed in maturity for harvest, far beyond normal maturity. The delay in maturity caused me to incur additional crop expense in producing and harvesting the peanuts and I experienced a significant reduction in harvest profit for the year 2000.

After I noticed the injury to my peanut crop, I called Jodie Stockett, the area representative for Dow and notified her about the injury to my 2000 peanut crop. She told me that she would come out and inspect my peanuts and that regardless of the outcome, I needed to grow the peanut crop to harvest which would mean that I should continue to raise the crop through to harvest. She told me that Dow would make up any lost production that I had in the harvest. I relied on these promises and grew the crop out to harvest and had a substantial loss of production and additional expenses.

When I purchased the Strongarm®, the package insert with all the information about the product was sealed in plastic and could not be opened until after the Strongarm® was purchased. After purchasing the Strongarm®, I opened the sealed package insert to read

the application instructions. I read the package insert about the application instructions and did not see any written information about the risks of using Strongarm® or limitations of claims against Dow Agrosciences if the Strongarm® did not perform or cause crop injury. After I used the Strongarm®, I noticed considerable crop injury and I read the package insert again. The package insert is Exhibit "1" attached to this Affidavit. On this reading, I noticed for the first time the paragraph entitled "Inherent Risks of Use" on page 10 of the package insert and the paragraph entitled "Limitations of Remedies" on page 11. The package insert is 4.5 inches by 4.5 inches and is numbered page 1 through page 11 with an unnumbered first page. The one paragraph with information on page 10 entitled "Inherent Risks of Use" is not conspicuous to me because the print is the smallest print on the page, all of the print is the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason I did not see the paragraph entitled "Inherent Risks of Use" is because the paragraph was on page 10 of the package insert and because the print is the smallest print size on the page and in the entire package insert and because the print is the same small size without any bold letters or capital letters or in different colors.

The one paragraph of information on page 11 entitled "Limitations of Remedies" is not conspicuous because the print is all the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason I did not see and appreciate the paragraph entitled "Limitations of Remedies" is because the paragraph was on page 11, which was the last page of the package insert, because the print is the smallest print size on the page and in the entire package insert, and because the print is all the same small size without any bold letters or capital letters or in different colors.

When I read the package insert the second time, I saw the language about Dow Agrosciences not being liable for consequential or incidental damages or losses. The terms consequential or incidental damages or losses are not defined in the package insert and I had no idea what they meant.

My lawyer tells me that the legal definition of consequential damages is "*Such damage, loss or injury as does not flow directly and immediately from the act of the party, but only from some of the consequences or results of such act. Damages which arise from intervention of special circumstances not ordinarily predictable. Those losses or injuries which are a result of an act but are not direct and immediate. Consequential damages resulting from a seller's breach of contract include any loss resulting from general or particular, requirements and needs of which the seller at the time of contracting had reason to know and which could not reasonably be prevented by cover or otherwise, and injury to person or property proximately resulting from any breach of warranty.* U.C.C. § 2-715(2)." (Black's Law Dictionary, Sixth Edition).

My lawyer tells me that the legal definition of incidental damages is *"Under U.C.C. § 2-710, such damages including any commercially reasonable charge, expenses or commissions incurred in stopping delivery, in the transportation, care and custody of goods after the buyer's breach, in connection with the return or resale of the goods otherwise resulting from the breach. Also, such damages, resulting from a seller's breach of contract, include expenses reasonably incurred in inspection, receipt, transportation and care and custody of goods rightfully rejected, any commercially reasonable charges, expenses or commissions in connection with effecting cover and any other reasonable expense incident to the delay or other breach.* U.C.C. § 2-715 (1)." (Black's Law Dictionary, Sixth Edition).

If I had know that Dow Agrosciences in the package insert was saying it would not pay me for all of my expenses and any loss profit if the Strongarm® caused injury to my peanut corp, I would not have bought or used the Strongarm® on my peanut crop in 2000.

FURTHER AFFIANT SAYETH NOT." Witness my hand this 29 day of March, 2002.

/s/ Thomas R. Fuston
THOMAS R. FUSTON

[Notary Omitted]

[Exhibit 1 reproduced at pp. 165-178, *infra*]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF STACY LEE PRICE

STATE OF §
COUNTY OF HALL §

On this day appeared **STACY LEE PRICE**, being duly sworn, stated on his oath as follows:

My name is Stacy Lee Price. I am an adult, over the age of 21 years and I am competent to testify as to all matters stated herein.

I am a farmer and I am one of the Defendants in the above styled and numbered lawsuit.

I am familiar with the facts and circumstances discussed herein and make the following declaration based on personal knowledge.

In the year 2000, I attended a grower's meeting sponsored by Valley Peanut Growers and Dow Agrosciences, LLC concerning Strongarm® herbicide. The Dow representative said that Strongarm® was an excellent herbicide to use in West Texas soil for peanuts

and weed control. He said that Strongarm® was less expensive than Cadre which was another herbicide that many of the growers had been using. He said that Strongarm® could be applied at planting time by incorporating Strongarm® into the soil with the peanut seed. After listening to what he said, I relied on his representations about Strongarm® and purchased and applied the Strongarm®.

After applying Strongarm® herbicide, I noticed that the peanut plants which were treated with Strongarm® were not growing normally, were stunted in their growth, were yellowed and discolored and were not developing foliage. I also noted that the peanut plants did not have feeder roots. As a farmer, I recognize each of these growth problems as a symptom of herbicide injury. The only herbicide that I had used on these pea nuts was Strongarm®. Because of these growth problems, the peanut crop was significantly delayed in maturity for harvest, far beyond normal maturity. The delay in maturity caused me to incur additional crop expense in producing and harvesting the peanuts and I experienced a significant reduction in harvest profit for the year 2000.

When I purchased the Strongarm®, the package insert with all the information about the product was sealed in plastic and could not be opened until after the Strongarm® was purchased. After purchasing the Strongarm®, I opened the sealed package insert to read the application instructions. I read the package insert about the application instructions and did not see any written information about the risks of using Strongarm® or limitations of claims against Dow Agrosciences if the Strongarm® did not perform or cause crop injury. After I used the Strongarm®, I noticed considerable crop injury and I read the package insert again. The package insert is Exhibit "1" attached to this Affidavit. On this reading, I noticed for the first time the paragraph entitled "Inherent Risks of Use" on page 10 of the package insert and the

paragraph entitled "Limitations of Remedies" on page 11. The package insert is 4.5 inches by 4.5 inches and is numbered page 1 through page 11 with an unnumbered first page. The one paragraph with information on page 10 entitled "Inherent Risks of Use" is not conspicuous to me because the print is the smallest print on the page, all of the print is the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason I did not see the paragraph entitled "Inherent Risks of Use" is because the paragraph was on page 10 of the package insert and because the print is the smallest print size on the page and in the entire package insert and because the print is the same small size without any bold letters or capital letters or in different colors.

The one paragraph of information on page 11 entitled "Limitations of Remedies" is not conspicuous because the print is all the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason I did not see and appreciate the paragraph entitled "Limitations of Remedies" is because the paragraph was on page 11, which was the last page of the package insert, because the print is the smallest print size on the page and in the entire package insert, and because the print is all the same small size without any bold letters or capital letters or in different colors.

When I read the package insert the second time, I saw the language about Dow Agrosciences not being liable for consequential or incidental damages or losses. The terms consequential or incidental damages or losses are not defined in the package insert and I had no idea what they meant.

My lawyer tells me that the legal definition of consequential damages is *"Such damage, loss or injury as does not flow directly and immediately from the act of the party, but only from some of the consequences or results of such act. Damages which arise from intervention of special*

circumstances not ordinarily predictable. Those losses or injuries which are a result of an act but are not direct and immediate. Consequential damages resulting from a seller's breach of contract include any loss resulting from general or particular requirements and needs of which the seller at the time of contracting had reason to know and which could not reasonably be prevented by cover or otherwise, resulting from any breach of warranty. U.C.C. § 2-715(2)." (Black's Law Dictionary, Sixth Edition).

My lawyer tells me that the legal definition of incidental damages is *"Under U.C.C. § 2-710, such damages including any commercially reasonable charge, expenses or commissions incurred in stopping delivery, in the transportation, care and custody of goods after the buyer's breach, in connection with the return or resale of the goods otherwise resulting from the breach. Also, such damages, resulting from a seller's breach of contract, include expenses reasonably incurred in inspection, receipt, transportation and care and custody of goods rightfully rejected, any commercially reasonable charges, expenses or commissions in connection with effecting cover and any other reasonable expense incident to the delay or other breach.* U.C.C. § 2-715 (1)." (Black's Law Dictionary, Sixth Edition).

If I had know that Dow Agrosciences in the package insert was saying it would not pay me for all of my expenses and any loss profit if the Strongarm® caused injury to my peanut corp, I would not have bought or used the Strongarm® on my peanut crop in 2000.

FURTHER AFFIANT SAYETH NOT." Witness my hand this 29 day of March, 2002.

/s/ Stacy Lee Price
STACY LEE PRICE

[Notary Omitted]

[Exhibit 1 reproduced at pp. 165-178, *infra*]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF ARTHUR GALVAN

THE STATE OF TEXAS §
COUNTY OF YOAKUM §

Before me, the undersigned authority, on this day personally appeared ARTHUR GALVAN, who being first duly sworn, made the following declaration under oath:

"I am a peanut farmer in Yoakum County, Texas. I am a party in the above referenced lawsuit. I purchased Strongarm® herbicide manufactured by Dow AgroSciences LLC from West Texas Agriplex located in Seminole, Texas in May, 2000. I applied the Strongarm® as I was planting my peanuts on my own farm and the G-5 partnership farm. After the peanuts came up, they were very weak, were not growing normally, were stunted in their growth and were nor properly developing foliage. I recognized each of these growth problems as a system of herbicide injury. The only herbicide I had used on the crop was Strongarm®. I contacted Gregg Alpers, area representative for Dow AgroSciences, L.L.C., and notified him about the injury to my 2000 peanut crop. He came

out and examined my peanuts. He told that if I would go ahead and grow the crop to maturity and harvest that the peanuts would grow out of the problems. He also told me that Dow AgroSciences LLC would make up any loss of production to me after the harvest. I relied upon his representation and promise and grew the crop to harvest. Dow AgroSciences LLC has not paid me for the year 2000 production loss as they promised to do. I relied on Dow AgroSciences LLC's representations and promises made to me by Mr. Alpers. Because I relied on Dow AgroSciences LLC's representations and promises, I spent substantial additional money for additional chemical inputs, water, labor, electricity and equipment time in growing the crop to harvest that I would not have spent except for the representations and promises of Dow AgroSciences LLC which I relied on, that they would pay me for the loss of production, if any, that I had for the year 2000 crop. The Strongarm® was defective as a herbicide and did not perform as a herbicide should and caused injury and money damages to my peanut crop.

I used Strongarm® on my peanuts in 2000 after it was recommended to me by my local chemical distributor West Texas Agriplex and the local Dow AgroSciences LLC representative.

When I purchased the Strongarm®, the package insert with all the information about the product was sealed in plastic and could not be opened until after the Strongarm® was purchased. After purchasing the Strongarm®, I opened the sealed package insert to read the application instructions. I read the package insert about the application instructions and did not see any written information about the risks of using Strongarm® or limitations of claims against Dow Agrosciences if the Strongarm® did not perform or cause crop injury. After I used the Strongarm®, I noticed considerable crop injury and I read the package insert again. The package insert is Exhibit "1" attached to this Affidavit. On this reading, I

noticed for the first time the paragraph entitled "Inherent Risks of Use" on page 10 of the package insert and the paragraph entitled "Limitations of Remedies" on page 11. The package insert is 4.5 inches by 4.5 inches and is numbered page 1 through page 11 with an unnumbered first page. The one paragraph with information on page 10 entitled "Inherent Risks of Use" is not conspicuous to me because the print is the smallest print on the page, all of the print is the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason I did nor see the paragraph entitled "Inherent Risks of Use" is because the paragraph was on page 10 of the package insert and because the print is the smallest print size on the page and in the entire package insert and because the print is the same small size without any bold letters or capital letters or in different colors.

The one paragraph of information on page 11 entitled "Limitations of Remedies" is not conspicuous because the print is all the same size with no capital letters or bold letters and the print is all the same color. It is my belief that the reason I did not see and appreciate the paragraph entitled "Limitations of Remedies" is because the paragraph was on page 11, which was the last page of the package insert, because the print is the smallest print size on the page and in the entire package insert, and because the print is all the same small size without any bold letters or capital letters or in different colors.

When I read the package insert the second time, I saw the language about Dow Agrosciences not being liable for consequential or incidental damages or losses. The terms consequential or incidental damages or losses are not defined in the package insert and I had no idea what they meant.

My lawyer tells me that the legal definition of consequential damages is "*Such damage, loss or injury, as does not flow directly and immediately from the act of the party, but only from some of the consequences or results of*

such act. Damages which arise from intervention of special circumstances not ordinarily predictable. Those losses or injuries which are a result of an act but are not direct and immediate. Consequential damages resulting from a seller's breach of contract include any loss resulting from general or particular requirements and needs of which the seller at the time of contracting had reason to know and which could not reasonably be prevented by cover or otherwise, and injury to person or property proximately resulting from any breach of warranty. U.C.C § 2-715(2)." (Black's Law Dictionary, Sixth Edition).

My lawyer tells me that the legal definition of incidental damages is "*Under U.C.C § 2-710, such damages including any commercially reasonable charge, expenses or commissions incurred in stopping delivery, in the transportation, care and custody of goods after the buyer's breach, in connection with the return or resale of the goods otherwise resulting from the breach. Also, such damages, resulting from a seller's breach of contract, include expenses reasonably incurred in inspection, receipt, transportation and care and custody of goods rightfully rejected, any commercially reasonable charges, expenses or commissions in connection with effecting cover and any other reasonable expense incident to the delay or other breach.* U.C.C. § 2-715(1)." (Black's Law Dictionary, Sixth Edition).

If I had know that Dow Agrosciences in the package insert was saying it would not pay me for all of my expenses and any loss profit if the Strongarm® caused injury to my peanut corp, I would not have bought or used the Strongarm® on my peanut crop in 2000.

FURTHER AFFIANT SAYETH NOT." Witness my hand this 29 day of March, 2002.

/s/ Arthur Galvan
ARTHUR GALVAN

[Notary Omitted]

EDITOR'S NOTE

THE FOLLOWING PAGES WERE POOR HARD COPY AT THE TIME OF FILMING. IF AND WHEN A BETTER COPY CAN BE OBTAINED, A NEW FICHE WILL BE ISSUED.

Dow AgroSciences™

Strongarm*

For Broadleaf Weed Control in Peanuts

Active Ingredients:	
diclosulam: N-(2,6-dichlorophenyl)-5-ethoxy-7-fluoro[1,2,4]triazolo-[1,5-c]pyrimidine-2-sulfonamide ...	84%
Inert Ingredients	16%
Total.....	100%

Contains 0.84 pounds of active ingredient per pound of product.

U.S. Patent No. 5,163,995

Keep Out of Reach of Children

CAUTION
PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Refer to back panel of bag for additional precautionary information including Personal Protective Equipment (PPE) and User Safety Recommendations.

Agricultural Use Requirements
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard

Notice: Read the entire label. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.**

In case of emergency endangering health or the environment involving this product call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-288

EPA Est. 46275-IL-2
900-006954 / 00128019

*Trademark of Dow AgroSciences LLC
Dow AgroSciences LLC
Indianapolis, IN 46268 U.S.A.

Herbicide Net Wt [5 x (2 x 0.45 oz)] water soluble packets

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Causes Moderate Eye Irritation • Harmful If Absorbed Through Skin

Avoid contact with eyes, skin, or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- **Long-sleeved shirt and long pants**
- **Waterproof gloves**
- **Shoes plus socks**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- **Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.**

First Aid

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.
If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

Environmental Hazards

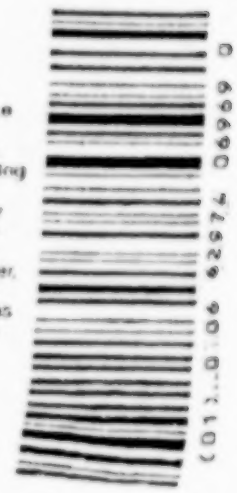
Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or when disposing of equipment washwaters.

This chemical and its transformation products demonstrate the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This chemical can contaminate surface water through spray drift.

Under some conditions, this chemical, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks post-application. Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Refer to Inside of label booklet for Directions for Use including Storage and Disposal.



Dow AgroSciences™

Strongarm®

For Broadleaf Weed Control in Peanuts

Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations, and Directions for Use including Storage and Disposal.

EPA Reg. No. 62719-288

EPA Est. 46275-IL-2
900-006953 / 00129103

*Trademark of Dow AgroSciences LLC
Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

Herbicide

NOTES

Active Ingredients:	
diclosulam: N-(2,6-dichlorophenyl)-5-ethoxy-7-fluoro[1,2,4]triazolo-[1,5-c]pyrimidine-2-sulfonamide	84%
Inert Ingredients	16%
Total	100%

Contains 0.84 pounds of active ingredient per pound of product.

U.S. Patent No. 5,163,995

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION PRECAUCION

Si usted no entiende la etiqueta, busque á alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Causes Moderate Eye Irritation • Harmful If Absorbed Through Skin

Avoid contact with eyes, skin, or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

First Aid

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.
If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or when disposing of equipment washwaters.

This chemical and its transformation products demonstrate the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This chemical can contaminate surface water through spray drift.

Under some conditions, this chemical, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks post-application. Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. **Exception:** If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

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Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.
Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.
Disposal: Wastes resulting from the use of this product may be disposed of on site according to label use directions or at an approved waste disposal facility.
Container Disposal: When all packets are used, dispose of empty package in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

General Information

Strongarm* herbicide is a soil-applied product for control of broadleaf weeds in peanuts.

Soil application: A single preplant incorporated, preplant surface, or preemergence application may be made in peanuts.

General Use Precautions and Restrictions

Maximum Application Rates

- In peanuts, do not apply more than 0.45 oz of Strongarm per acre per year in any combination of preplant incorporated, preplant surface, or preemergence applications.
- **Note:** Only a single soil application per growing season may be made in peanuts.

Preharvest Interval: Do not harvest peanuts for 30 days following application.

Read and carefully follow all applicable directions, precautions and restrictions on labeling for other products used in combination with Strongarm.

Aerial application of this product is prohibited.

Do not allow livestock to graze treated areas or harvest forage or hay from treated areas.

Iron Chlorosis: There are isolated areas of the country where soil-induced iron chlorosis routinely occurs. Severity of iron chlorosis symptoms may increase when Strongarm is soil-applied in areas with a history of soil-induced iron chlorosis or other nutrient induced crop injury.

Proper Handling Instructions

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the

pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Chemigation: Do not apply this product through any type of irrigation system.

Do not use flood irrigation to apply or incorporate this product.

This product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Crop Rotation Interval for Common Crops

Crop	Rotation Interval (1) (Months)
soybeans, peanuts	no restriction
wheat, barley	4
oats, rye	6
cotton	10
corn (2), rice, tobacco, sorghum	18
sugar beets, sunflowers and other crop not listed	30 (3)

1. Minimum number of months that must pass before planting other crops after application of Strongarm at up to 0.45 oz/acre in peanuts.
2. The crop rotation interval for corn hybrids identified as "IR" is 10 months.
3. Rotation to sugar beets, sunflowers, and all other crops not listed requires a 30-month rotation interval and a successful field bioassay.

Field Bioassay Instructions

Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop variety across the field previously treated with Strongarm. Plant the strips perpendicular to the direction Strongarm was applied. The strips should also be located so that different field conditions are encountered, including differences in soil texture, pH, and drainage. If the crop does not show visible symptoms of injury, stand reduction, or yield reduction, the field can be seeded with the test crop in the growing season following the bioassay. If visible injury, stand reduction, or yield reduction occurs, the test crop should not be seeded, and the bioassay must be repeated the next growing season.

Mixing and Appiication

Spray Volume and Application

Apply Strongarm in sufficient spray volume to provide uniform coverage. A spray volume of 10 or more gallons per acre is recommended for soil applications. Sufficient agitation should be maintained during mixing and spraying to ensure a uniform spray mixture. Apply with ground equipment using standard low pressure (20 to 40 psi) herbicide sprayers equipped with nozzles that provide uniform spray coverage. Screens in spray lines should be no finer than 50 mesh (100 mesh is finer than 50 mesh)..

Strongarm Applied Alone

Strongarm water dispersible granules are provided in water soluble packets that require thorough mixing. **Note:** The water soluble packets are not soluble in liquid fertilizer. If applied in liquid fertilizer, Strongarm must be pre-mixed (slurried) with water and then added to the liquid fertilizer solution. Premixing may also be used to aid in mixing with water. See pre-mixing instructions below.

Handling Precautions for Water Soluble Packets: Do not remove water soluble packet from overpack except for immediate use. Do not open water soluble packets (product in transparent film). Do not allow water soluble packet to come into contact with water prior to use. Do not handle water soluble packet with wet hands or wet gloves. Carefully reseal overpack containing unused water soluble packets and protect package from moisture.

Determining the Number of Water Soluble Packets Required:

Application Rate (oz/acre)	Acres per Individual Bubble Packet
0.45 †	1.0

Formula: Acres to be treated ÷ Acres/Packet = Number of Packets

Mixing Order:

1. Fill the tank with ½ of the total amount of water or liquid fertilizer for the load. **Note:** If liquid fertilizer is being used as the spray carrier, water-soluble packets must be pre-mixed as described below before adding to the spray tank. Start the agitation system.
2. Add water soluble packets by opening the overpack and adding the packet (product in transparent film) directly into the spray tank while agitating. Before spraying, make sure packets have completely disintegrated and product is thoroughly mixed with water. Depending on the water temperature and the degree of agitation, the packet and its contents should be completely dispersed within 5 minutes from the time they were added to the water.
3. Continue agitation and finish filling tank.

Note: To ensure a uniform spray mixture continuous agitation is required during application. If product is allowed to settle, thoroughly agitate to resuspend the mixture before spraying. To ensure product effectiveness, apply within 24 hours of mixing. Weed control with Strongarm that has been mixed and allowed to stand for more than 48 hours may be reduced.

Strongarm Applied in Tank-mix Combination

If a broader spectrum of weed control is required, Strongarm may be tank-mixed with labeled rates of other herbicides provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product.

Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates for respective products or maximum allowable application rates for any active ingredient in the tank mix.
- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned. (See Equipment Clean-Out Procedures.)
- Always perform a (jar) test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of Strongarm and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately ½ hour. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank-mixes. Sparger type agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing into the spray mixture.

Mixing Order for Tank-mixes:

1. Fill the spray tank to ½ of the total spray volume required with water or liquid fertilizer. **Note:** If liquid fertilizer is being used as the spray carrier, water-soluble packets must be pre-mixed as described below before adding to the spray tank. Start the agitation system.
2. Add water soluble packets by opening the overpack and adding water soluble packet (product in transparent film) directly into the spray tank while agitating and allow time to disperse. Allow time for complete mixing (approximately 5 minutes). Before adding other products, make sure packets have completely disintegrated and product is thoroughly mixed.
3. Add different formulation types in the following order: (1) Other formulation packaged in water soluble film; (2) Any compatibility agent, if required; (3) other dry flowables; (4) wettable powders; (5) aqueous suspensions, flowables and liquids. Maintain agitation and fill spray tank to ¾ of total spray volume and add: (5) emulsifiable concentrates and (6) solutions (i.e., fertilizers). Allow time for complete mixing after each addition.
4. Finish filling the spray tank. Maintain continuous agitation during mixing and throughout application.

If application or agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be re-suspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to re-suspend than when originally mixed.

Pre-mixing (Slurry) of Water Soluble Packets

The film used in water soluble packaging for Strongarm is not soluble in liquid fertilizer solutions. In order to add Strongarm to liquid fertilizer carrier, the product must be premixed with water. Pre-mixing is also an alternative mixing method for application in water. Use a minimum 2 fl oz of water for each individual 0.45 oz water soluble packet of Strongarm. The packets can be stirred immediately on addition to water or allowed to dissolve. Stir (or shake if pre-mixed in a closed container) until the packets are completely dissolved and granules are dispersed and then add to the spray tank or inductor (recommended through a 20-35 mesh screen). Rinse container used for pre-mixing and add rinsate to spray tank.

Pre-mixing (other products): If pre-mixing is required for other dry or flowable products applied in tank-mix combination with Strongarm, follow recommendations for pre-mixing of such products provided in their respective product labels.

Equipment Clean-out Procedures:

1. Drain any remaining spray mixture from the application system.
2. Hose down the interior surfaces of the tank while filling the tank ½ full with water.

3. Add household ammonia, at a rate of 1 gallon per 100 gallons of water. Recirculate for 5 minutes and spray out part of this mixture for 5 minutes through the boom. Drain tank.
4. Remove all spray nozzles and screens and clean separately.

Note: If this spray equipment will be used on a crop that is sensitive to Strongarm, steps 1-3 should be repeated. Exterior surfaces of spray equipment should also be washed thoroughly.

All rinsate should be disposed of on site or at an approved waste disposal facility.

Approved Uses

PEANUTS (Soil Application)

Strongarm may be used in various tillage programs including, but not limited to, strip till, no till and conventional tillage operations. Application of Strongarm on soils with greater than 5% organic matter may result in reduced weed control and require subsequent postemergence applications of other herbicides appropriate for specific weeds. Do not use on peat or muck soils. Season-long control of severe weed infestations may require a postemergence application of complimentary herbicides following application of Strongarm.

Note: Environmental and soil factors can influence the performance and selectivity of any herbicide treatment. Rainfall of 0.5 inches or greater is required for optimum weed control by most soil herbicides, including Strongarm. Strongarm and other herbicides when incorporated will perform most optimally when evenly distributed in the surface soil. When emergence of the planted crop is delayed due to unusually cool and/or wet conditions, factors such as pH, disease, and nutrient deficiencies can contribute to reduced crop tolerance to a soil-applied herbicide.

Cultivation: If required, cultivation should be shallow to avoid excessive movement of treated soil and to avoid exposing weed seed buried deep within the soil.

Area of Use (Peanuts): Use of Strongarm is recommended in all areas where peanuts are grown.

Application Rates	
Crop	Strongarm (oz/acre)
Peanuts	0.45
Weeds Controlled	
bristly starbur common cocklebur common lambsquarters common ragweed common sunflower eclipta	devil's-claw Florida beggarweed giant ragweed morningglory species nutsedge species (1, 2) Palmer amaranth	Pennsylvania smartweed prickly sida redroot pigweed smooth pigweed spurred anoda	spurge species shining tickweed tropic croton Virginia Copper Leaf velvetleaf wild poinsetta

Note: Numbers in parentheses "(-)" refer to footnotes below.

1. Heavy infestations may require postemergence application of complimentary herbicides following a soil application of Strongarm for season-long control.

2. The level of nutsedge control provided by Strongarm on nutsedge can vary depending on weed density and soil or environmental conditions.

   For best results:
   - Fields should be clean-tilled and weed-free.
   - Apply Strongarm as close as possible to planting.
   - If irrigation is available, immediately apply 0.25 to 0.5 inch of water.
   - Cultivation, a tank mixture, or applications of postemergence herbicides may also be needed to achieve desired level of control.

Application Directions

Preplant Incorporated Application

Apply Strongarm alone or in tank-mix combination with other herbicides registered for preplant incorporated application. Apply to a seedbed that is relatively free of clods. Incorporate the herbicide(s) into the top 1 to 3 inches of the final seedbed using equipment that provides thorough soil mixing. Do not apply Strongarm more than 4 weeks before planting. For optimum results, apply Strongarm at or just prior to planting. When Strongarm is applied in tank-mix combination with other herbicide(s), follow the incorporation directions for the tank-mix partner(s). Follow applicable use instructions, including application rates, precautions and restrictions or each product used in the tank-mixture.

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Preplant Surface Application

Apply Strongarm alone or in tank-mix combination with other herbicides registered for preplant soil surface applications. Apply to a seedbed that is relatively free of clods. Do not apply Strongarm more than 4 weeks before planting. For optimum results, apply Strongarm at or just prior to planting. Soil surface applications are not effective until rainfall or irrigation of at least 0.25 - 0.5 inches has moved Strongarm into soil where weed germination occurs. If rainfall is not anticipated, shallow (i.e., 2 inches) incorporation prior to planting is recommended to place Strongarm in contact with germinating weeds. If applied in tank-mix combination, follow use instructions, including application rates, precautions and restrictions of each product used in the tank-mixture. For minimum-tillage or no tillage or reduced tillage systems, when weeds are present at the time of application, apply in a tank mix combination a contact herbicide such as Starfire or Roundup herbicide.

Note: Reduced weed control in the planted row may occur from exposure of untreated soil during the planting operation if surface applications are not incorporated prior to planting.

Preemergence Application

Apply after planting but prior to crop or weed emergence. Preemergence applications are not effective until rainfall or irrigation of at least 0.25 - 0.5 inches has moved Strongarm into the soil where weed germination occurs. Strongarm may be applied alone or in tank-mix combination with herbicides registered for preemergence application. When applied in tank-mix combination, follow applicable use instructions,

including application rates, precautions and restrictions of each product used in the tank-mixture. For optimum results, Strongarm should be applied at or near planting, prior to germination of weeds and emergence of the crop.

Minimum Tillage, No Tillage, Strip Tillage, or other reduced tillage systems

In these tillage systems, where peanuts are planted directly into a cover crop, stale seedbed, or previous crop residues, a contact herbicide such as Starfire or Roundup may be tank mixed with Strongarm to control existing weeds. Apply before, during (behind the planter), or after planting, but before the crop emerges.

Strongarm Followed by Postemergence Treatments

Weeds and grasses not controlled by Strongarm may be controlled with postemergence herbicide products. Follow the postemergence manufacturer's labels for application rates, weeds controlled, applicable use directions, precautions and limitations before use.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to the label instructions (including adverse conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by the buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

*Trademark of Dow AgroSciences LLC

NOTES

Supplemental Labeling

Dow AgroSciences

Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268-1054 USA

Strongarm*

EPA Reg. No. 62719-288

Preemergence Broadleaf Weed Control in Peanuts

(For Distribution and Use Only in the states of New Mexico, Oklahoma and Texas)

ATTENTION

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for Strongarm before applying. Carefully follow all precautionary statements and applicable use directions.
- Except as described in this supplemental labeling, use of Strongarm is subject to all precautions and limitations imposed by the labels affixed to the containers for Strongarm.

Directions for Use

Strongarm* herbicide may be soil-applied as a broadcast or band application for preemergence control of broadleaf weeds in peanuts. Strongarm may be applied alone or in tank mix combination with other herbicides registered for preemergence use in peanuts.

Mixing and Application: Follow mixing directions in the label booklet attached to the product container. Apply Strongarm in sufficient spray volume to provide uniform coverage. A spray volume of 10 or more gallons per acre is recommended for soil applications.

For band applications, use nozzles designed for even application within the band (usually with an "E" designation). If you are unsure about the suitability of a particular nozzle for band application, consult the manufacturer's specifications. The following formula may be used to determine the amount of herbicide needed.

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast rate per acre} = \text{Amount needed per acre of field}$$

Determining the Number of Water Soluble Packets Required:

Application Rate (oz/acre)	Acres per Individual Bubble Packet
0.3 - 0.45	1.5 to 1.0

Formula: Acres to be treated ÷ Acres/Packet = Number of Packets

Sample Calculation: Acres to be treated = 31
Rate Needed = 0.3 oz/A
Acres/Packet = 1.5 acres/packet
31 acres ÷ 1.5 acres per packet = 20.66 packets
(20.66 packets rounded up to nearest whole number of packets = 21 packets)

Preemergence Application

Texas and New Mexico: Apply Strongarm at the rate of 0.45 oz as a preemergence application from no less than 5 days after planting through "at-cracking†".

Oklahoma: Strongarm, preemergence at the rate of 0.3 oz per acre may be applied from immediately after planting through "at-cracking". Strongarm at the 0.45 oz per acre rate may be applied from no less than 5 days after planting through "at-cracking".

† **"Cracking"** of soil occurs when soil is displaced by germinating seedlings just prior to emergence.

Peanuts should be planted at least 1 1/2 inches deep. For best results, soil moisture should be sufficient for immediate germination. When Strongarm is soil applied, rainfall or irrigation equal to 0.25 to 0.5 inches is required for herbicidal activation and to move the active ingredient into the zone of weed germination. Under dry soil conditions, a minimum of 0.5 inches of rain/irrigation water is necessary for herbicidal activation. If weeds have emerged prior to application, use an appropriate contact herbicide to control the weeds that are present.

Application Rates	
Crop	**Strongarm (oz/acre)**
Peanuts	0.3 - 0.45
Weeds Controlled	
bristly starbur	Pennsylvania smartweed
common cocklebur	prickly sida
common lambsquarters	redroot pigweed
common ragweed	smooth pigweed
common sunflower	spurge species
eclipta (1)	spurred anoda
devil's-claw	shining tickweed
Florida beggarweed	tropic croton
giant ragweed	velvetleaf
morningglory species (1)	Virginia copperleaf (1)
nutsedge species (1, 2, 3)	wild poinsetta
Palmer amaranth	

Note: Numbers in parentheses "(-)" refer to footnotes below.

1. When using the 0.3-oz rate, weed control results on eclipta, morningglory, nutsedge, and Virginia copperleaf may be variable. A follow up treatment with another herbicide may be necessary for full season control.
2. Heavy infestations may require postemergence application of complimentary herbicides following a soil application of Strongarm for season-long control.
3. The level of nutsedge control provided by Strongarm can vary depending on weed density and soil or environmental conditions (especially moisture).

For best weed control results:

- Fields should be clean-tilled and weed-free.
- Cultivation, a tank mixture, or applications of postemergence herbicides may also be needed to achieve desired level of weed control.

Tank Mixing: Strongarm may be applied in tank mix combination with labeled rates of other herbicides labeled for preemergence application to peanuts provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product. When applied in tank mix combination with other herbicides, follow applicable use instructions, including application rates, precautions and restrictions for each product used in the tank mixture, including use of adjuvants. Refer to the product label booklet for Strongarm for detailed information on tank mixing.

Minimum CT

Minimum Tillage, No Tillage, Strip Tillage, or other reduced tillage systems: In these tillage systems, where peanuts are planted directly into a cover crop, stale seedbed, or previous crop residues, a burndown application of a herbicide such as Gramoxone Max, or glyphosate-containing product† such as Roundup UltraMAX, Glyphomax, or Glyphomax Plus should be used to control existing weeds. Do not rely on Strongarm for post emergence control of emerged weeds.

† When tank mixing with glyphosate and ammonium sulfate, add ammonium sulfate to the tank mixture before adding glyphosate.

Strongarm Followed by Postemergence Treatments: Weeds and grasses not controlled by Strongarm may be controlled with postemergence herbicide products. Follow the manufacturer's label for the postemergence product for application rates, weeds controlled, applicable use directions, precautions and limitations before use.

Use Precautions and Restrictions:

- **Preharvest Interval:** Do not harvest peanuts for 30 days following application.
- Maximum Use Rate for Peanuts: Do not apply more than 0.45 oz of Strongarm per acre per year.
- Do not apply Strongarm to soils with a pH of 7.2 or greater.
- Seeds that have low germination or low early season vigor have shown more susceptibility to environmental stress and herbicide injury. Do not apply Strongarm to peanut varieties with a warm germination test of less than 80% germinable seed.
- Seeds must be planted at least 1 1/2 inches deep.
- Extended cold wet conditions, following applications of Strongarm, which persist during germination and early crop development will result in crop injury. Do not apply Strongarm when below normal soil and/or air temperatures are expected within 5 days of application.
- **Aerial application of this product is prohibited.**
- **Chemigation:** Do not apply this product through any type of irrigation system.
- Rainfall or irrigation immediately following application may increase potential for crop injury especially under persistent cool conditions.
- Preemergence applications are not effective until rainfall or irrigation of at least 0.25 – 0.5 inches has moved Strongarm into the soil where weed germination occurs. Under dry soil conditions, a minimum of 0.5 inches of rain/irrigation water is necessary for herbicidal activation.
- Do not use Strongarm in peanuts grown under drip irrigation. Peanuts grown under drip irrigation must rely on timely rainfall to uniformly moisten the soil since pegging will not occur where surface soil is dry.
- Do not use flood irrigation to apply or incorporate Strongarm.
- When using furrow irrigation, weed control results will be variable if no rainfall is received within 2 weeks of application of Strongarm.
- Avoid use of irrigation water that does not meet irrigation water quality standards published by state or land grant universities. If no standards have been published, use guidelines in the Western Fertilizer Handbook. Poor water quality can injure or kill peanuts.
- Do not allow livestock to graze treated areas or harvest forage or hay from treated areas.

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

[Filed Apr. 10, 2002]

DEFENDANTS' FIRST AMENDED COUNTERCLAIM

TO THE HONORABLE JUDGE OF SAID COURT:

NOW COME COUNTER-PLAINTIFFS, DENNIS BATES, JIMMY BURSON BENNY JUDAH d/b/a CLEARWATER FARMS, RICHARD COX, WAYNE DAVIS, TODD DENMAN, Personal Representative of the Estate of BURK DENMAN, NEIL FRIESEN, JAKE FROESE, THOMAS R. FUSTON, ARTHUR GALVAN d/b/a G-5 PARTNERSHIP, GREG HUGHES, GREG HUGHES and KARL DON HUGHES d/b/a JH CATTLE COMPANY, RUDY KLASSEN, RONNIE N. LOVE, KEVIN MATHIS, BRAD PALMER, KIRK PARRISH d/b/a K-L FARMS, JERRY PARRISH, JOEVELYN PATTERSON and DONALD C. GRUBEN, STACY LEE PRICE, BENNY JUDAH d/b/a PROGRESSIVE FARMS, MORRIS RUSHING d/b/a PEA-COT FARMS, BILLY SHANNON, CRAIG WEST and FRENCHIE LEE WHEELER complaining of DOW AGROSCIENCES LLC, hereinafter referred to as Counter-Defendant, and for

cause of action would respectfully show unto the Court as follows:

I.

Counter-Plaintiffs are each defendants named in Plaintiff's Complaint for Declaratory Relief filed in this Court.

Counter-Defendant DOW AGROSCIENCES LLC is a foreign corporation or joint-stock association doing business in the state of Texas. Dow AgroSciences LLC is before the Court and no service of process is necessary upon the Counter-Defendant.

II.

FACTS

Counter-Plaintiffs are farmers who now own or in the past have owned and operated lands and peanut farms. This action arises out of damages suffered by Counter-Plaintiffs as a result of the use of Strongarm®, a herbicide designed, formulated, developed, produced and manufactured by Counter-Defendant Dow AgroSciences LLC and sold and distributed through the stream of commerce by Dow AgroSciences LLC's retail distributors. At all relevant times, the Strongarm®, before it left Dow AgroSciences LLC, had been rendered ineffective as a herbicide. The peanuts treated with Strongarm® did not grow properly, were stunted, did not properly develop foliage and delayed in maturing for harvest resulting in increase expense and production in reduced profit from sale and harvest. On information and belief, Counter-Plaintiffs used the Strongarm® on the peanut farms in the year 2000 which did irreparable damages to Counter-Plaintiffs' harvests and the lands in the years 2000 and 2001.

III.

NEGLIGENCE

The Counter-Defendant Dow AgroSciences LLC was negligent in the development, testing, manufacture, production and promotion of Strongarm®. The injuries and damages to the Counter-Plaintiffs peanut crops for the years 2000 and 2001 were directly and proximately caused by the negligence and carelessness of Counter-Defendant.

Further, the attempted disclaimer of warranties and limitations of remedies are not conspicuous, did not comply with state or federal law and are therefore ineffective and void.

IV.

DECEPTIVE TRADE PRACTICE ACT

At all relevant times to this suit, Counter-Plaintiffs were acting as "consumers" as defined in the Tex. Bus. & Comm. Code Ann. §17.45(4) (Vernon's 1987) of the Deceptive Trade Practices Act ("DTPA") and were engaged in "trade and commerce" as defined in the Act.

This suit is brought against Counter-Defendant pursuant to the provisions of §17.41 *et. seq.* of the DTPA because, in violation of certain provisions of the DTPA, the Counter-Defendant:

(a) represented that Strongarm® had sponsorship, approval, characteristics, uses or benefits which it did not have; and,

(b) represented that Strongarm® was of a particular standard, quality, or grade, when in fact, it was another.

Each and every one of the foregoing acts and omissions, taken separately and collectively, constitutes a

producing cause of the damages sustained by each Counter-Plaintiff, as more particularly set forth below.

Counter-Defendant knew or had reason to know that its product, Strongarm®, would be used by peanut farmers. In this connection, Counter-Defendant knew or had reason to know of such particular purpose because its product, Strongarm®, was designed, manufactured, sold and intended for use as a herbicide, and Counter-Defendant advertised and touted the supposedly outstanding characteristics of Strongarm® for such purposes. As a result, Counter-Defendant knew or had reason to know that each Counter-Plaintiff was relying on Counter-Defendant's skills and judgment to supply a product suitable for its intended use. Each Counter-Plaintiff relied on Counter-Defendant's skill and judgment that the product was fit for the particular purposes for which it was to be put. The Strongarm® was, in fact, not suitable for this particular purpose.

Each Counter-Plaintiff would further show that Counter-Defendant has undertaken an unconscionable course of conduct, as that term is defined by §17.45(5) of the DTPA. Counter-Defendant knew or should have known that Strongarm® was not suitable and would fail, was not of good workmanlike quality, and would eventually cause damage to consumers, including each Counter-Plaintiff. Counter-Defendant's conduct was an unconscionable course of action, as that term is defined in the Act, in that it resulted in a gross disparity between the value each Counter-Plaintiff gave in consideration for the Strongarm® and the value of the product actually received. Further, said unconscionable course of action took advantage of the lack of knowledge, ability, experience or capacity of each Counter-Plaintiff to know of the substantial latent defects in Strongarm® and, as such, took advantage of each Counter-Plaintiff's lack of knowledge, experience and capacity to a grossly unfair

degree. Said unconscionable course of action was a producing cause of damages to each Counter-Plaintiff.

Counter-Defendant committed the above-described violations of the DTPA knowingly, as that term is defined in the Act. The unconscionable action or course of action by Counter-Defendant was done knowingly and with actual awareness of the unfairness of such acts or practices. Each Counter-Plaintiff requests an award of two times the amount of actual damages under $1,000.00 and three times each Counter-Plaintiff's actual damages over $1,000.00, pursuant to §17.50 of the DTPA.

Each Counter-Plaintiff would further show that recovery of court costs and attorney's fees are authorized under the Act.

Further, the attempted disclaimer of warranties and limitations of remedies are not conspicuous, did not comply with state or federal law and are therefore ineffective and void.

V.

BREACH OF CONTRACT

It was in the contemplation of the parties when the contract for purchase of Strongarm® that is the basis of this suit was signed that the Counter-Plaintiffs would use the Strongarm® on the peanut crop to engage in the business of peanut farming with the expectation of generating substantial income with a reasonable net profit. The Strongarm®'s failure to perform has totally destroyed all the Counter-Plaintiffs' prospects to profit from the intended activity. Further, each Counter-Plaintiff has incurred additional expense in growing the crop to harvest. Each Counter-Plaintiff has suffered loss of the benefit of the bargain, consequential damages and incidental expenses.

Further, the attempted disclaimer of warranties and limitations of remedies are not conspicuous, did not

comply with state or federal law and are therefore ineffective and void.

VI.

BREACH OF EXPRESS AND IMPLIED WARRANTIES

Prior to the purchase of the Strongarm® by each Counter-Plaintiff, Counter-Defendant induced purchases of the Strongarm® by expressly warranting to each Counter-Plaintiff by advertisements directed to the attention of the public, and particularly to the ultimate consumers, that such consumers, including each Counter-Plaintiff, could safely use Strongarm® in treating their peanut crop and that it would not damage or harm the land or peanut crop growing thereon. The Counter-Defendant expressly warranted Strongarm® as being reasonably fit for the purposes stated and as a product that was effective in treating many types of agricultural crops or plants for weeds without limitations.

In purchasing the Strongarm®, each Counter-Plaintiff relied on the reputation, skill and judgment of the Counter-Defendant and upon Counter-Defendant's express warranties, as described above.

At the time of the purchase of the Strongarm® by each Counter-Plaintiff, the express warranties about the efficacy of Strongarm® was not true and the Strongarm® was not reasonably suitable and fit for use, and as a direct result of said breach of express warranties, the injury and damages occurred, as set forth herein.

As a direct and proximate result of the breach of express warranties by the Counter-Defendant, each Counter-Plaintiff sustained substantial damages to his lands and peanut crops continuing to the present time, and expects to incur substantial future damage to the land and peanut crops caused by the Counter-Defendant's product.

In addition, Counter-Defendant impliedly warranted that Strongarm® was merchantable and was fit for the purpose for which it was manufactured, that it was a safe and suitable herbicide to be used in peanut crops for weeds.

Strongarm® was, in fact, not fit for its intended purpose as warranted by Counter-Defendant and as a proximate result of the breach of warranty of fitness, each Counter-Plaintiff sustained injuries and damages as alleged below.

Further, the attempted disclaimer of warranties and limitations of remedies are not conspicuous, did not comply with state or federal law and are therefore ineffective and void.

VII.

STRICT LIABLITY IN TORT

The Strongarm® purchased by each Counter-Plaintiff was designed, formulated, developed, produced, manufactured and sold by Counter-Defendant. At all relevant times, the Strongarm® before it left Dow AgroSciences, LLC was defective, which defect rendered the product unreasonably dangerous as a herbicide and the Counter-Defendant is liable and damages to each Counter-Plaintiff under the provisions of §402a and §402b, Restatement of Torts 2d. The defective nature of the Strongarm® was a producing cause of damages to each Counter-Plaintiff.

Further, the attempted disclaimer of warranties and limitations of remedies are not conspicuous, did not comply with state or federal law and are therefore ineffective and void.

VIII.

FRAUD AND FRAUD IN THE INDUCEMENT

Dow AgroSciences, LLC and its local retail distributors who sold the product to each Counter-Plaintiff represented that the Strongarm® was an excellent herbicide for use in peanuts. Based on this representation, each Counter-Plaintiff purchased and used Strongarm® as instructed. Shortly after using the Strongarm® each Counter-Plaintiff noticed that the peanuts were not growing and maturing and called this fact to Dow AgroSciences LLC and their representatives' attention. Dow AgroSciences LLC acting by and through its agents and representatives represented to each Counter-Plaintiff that if they would grow the peanut crop to maturity the delay in growth and stunting would resolve itself and it would make a normal crop and, if it did not, Dow AgroSciences LLC would pay each Counter-Plaintiff for his loss of profit and all other losses and damages.

Each Counter-Plaintiff detrimentally relied upon this representation and suffered losses and damages.

Further, the attempted disclaimer of warranties and limitations of remedies are not conspicuous, did not comply with state or federal law and are therefore ineffective and void.

IX.

ESTOPPEL AND WAIVER

Dow AgroSciences LLC and its local retail distributors represented to each Counter-Plaintiff that Strongarm® was an excellent herbicide for use in peanuts. Based on this representation, each Counter-Plaintiff purchased and used Strongarm® as instructed. Shortly after using the Strongarm® each Counter-Plaintiff noticed that the peanuts were not growing and maturing and called this fact to Dow AgroSciences LLC and their

representatives' attention. Dow AgroSciences LLC represented to the Counter-Plaintiffs that if they would grow to maturity the delay in growth and stunting would resolve itself and it would make a normal crop and, if it did not, Dow AgroSciences LLC would pay each Counter-Plaintiff for his loss of profit and for all other losses and damages.

Each Counter-Plaintiff detrimentally relied on this representation and suffered losses and damages. Dow AgroSciences LLC is estopped to rely upon disclaimer of warranties or limitations of remedies as a result of its conduct. Dow AgroSciences LLC has waived its disclaimer of warranties and limitations of remedies provision as a result of its conduct in relation to each Counter-Plaintiff.

Further, the attempted disclaimer of warranties and limitations of remedies are not conspicuous, did not comply with state or federal law and are therefore ineffective and void.

X.

NEGLIGENT REPRESENTATION

The Counter-Defendant, acting by and through its field representatives and authorized retail distributors promoted Strongarm® as an excellent herbicide for use in west Texas peanuts. The Counter-Plaintiff growers each relied on their representations about the many beneficial qualities and characteristics of Strongarm®. The representations were untrue and were made fraudulently and/or negligently. Each of the Counter-Plaintiff growers sustained damage and loss as a result of the justifiable reliance on the misrepresentations concerning Strongarm®.

XI.

DAMAGES (APPLICABLE TO ALL COUNTS)

The acts and omissions of Counter-Defendant were a direct and proximate cause of each Counterplaintiff's

damages, each of which shall continue in the future, including, but not limited to, the following:

(a) loss of profits for the years 2000 and 2001;

(b) reasonable attorney's fees;

(c) all expenses and costs of this litigation;

(d) lawful pre-judgment interest;

(e) lawful post-judgment interest;

(f) additional, statutory and exemplary damages as allowed by common law and allowed by statutory law including the DTPA; and,

(g) any and all other damages of every nature and kind suffered by each Counter-Plaintiff as a consequence of the acts and omissions of the Counter-Defendant as described above.

XII.

All conditions precedent to the filing of this lawsuit and Counter-Plaintiff's remedies have been performed or have occurred.

Each Counter-Plaintiff hereby demands a trial by jury.

XIII.

Each Counter-Plaintiff's claim does not arise under any federal law including 7 U.S.C. §§136-136y, Federal Insecticide, Fungicide and Rodenticide Act and each Counter-Plaintiff does not claim that Strongarm® violated any provision of the Act by its labeling and does not claim any damage to human health or the environment.

WHEREFORE, PREMISES CONSIDERED, each Counter-Plaintiff prays that the Counter-Defendant be cited to appear and answer herein; that at trial, each Counter-Plaintiff have judgment based on the legal remedy providing each Counter-Plaintiff with the greatest

relief against the Counter-Defendant, Dow AgroSciences LLC, for each legal remedy, collectively or in the alternative, for actual damages, additional damages, statutory damages and exemplary damages with interest thereon, both pre-judgment and post-judgment; that actual damages be trebled, and for such other and further additional damages as provided by the DTPA; that each Counter-Plaintiff recover reasonable attorney's fees, expenses of this litigation and costs of court; and for such other and further relief, at law or in equity, to which each Counter-Plaintiff may show himself justly entitled.

Respectfully submitted,

PHIL WATKINS
One Riverwalk Place, Suite 1750
700 N. St. Mary's Street
San Antonio, TX 78205
(210) 225-6666
(210) 225-2300 Fax

By /s/ _____
PHIL WATKINS
State Bar No. 20927400

JOHN SIMPSON
SPLAWN & SIMPSON, INC.
907 Texas Avenue
P.O. Box 1376
Lubbock, Texas 79408-1376
Telephone: (806) 765-8048
Telecopier: (806) 765-5308

ATTORNEYS FOR DEFENDANTS/COUNTER-PLAINTIFFS

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

[Filed Apr. 15, 2002]

FIRST AMENDED COMPLAINT FOR DECLARATORY RELIEF

Plaintiff Dow AgroSciences LLC ("Dow AgroSciences"), by its attorneys, files this First Amended Complaint for Declaratory Relief and alleges as follows:

JURISDICTION AND VENUE

1. This is a civil action over which this Court has original federal subject matter jurisdiction pursuant to 28 U.S.C. § 1332 (a)(1). There is complete diversity of citizenship between the parties and the matter in controversy exceeds the sum or value of seventy-five thousand ($75,000), exclusive of interest or costs, with respect to each individual Defendant.

2. Venue in this district is proper pursuant to 28 U.S.C. § 1391(a)(1) in that the majority of the defendants reside in this judicial district in the State of Texas and all defendants reside in the State of Texas.

3. Venue in this district is proper pursuant to 28 U.S.C. § 1391(a)(2) because a substantial part of the

events or omissions giving rise to the claims herein occurred in this district and because a substantial part of the property that is the subject matter of this action is situated in this district.

4. This Court also has supplemental jurisdiction over the dispute between Dow AgroSciences and the defendants pursuant to 28 U.S.C. § 1367(a) in that the defendants' claims are part of the same case or controversy as those of the other defendants and arise from the same central core of operative facts.

5. This Court has personal jurisdiction over each defendant pursuant to Tex. Civ. Prac. & Rem. Code Ann. § 17.042.

PARTIES

6. Dow AgroSciences is a Delaware limited liability company with its principal place of business in Marion County, Indiana. Dow AgroSciences LLC was originally created as DowElanco, an Indiana general partnership, on October 31, 1989. DowElanco converted to a limited liability company on July 1, 1997 (DowElanco LLC) and changed its name to Dow AgroSciences effective January 1, 1998. Dow AgroSciences is a citizen of both Delaware and Indiana as provided by 28 U.S.C. § 1332(c)(1).

7. The individual Defendants are a group of individual-peanut crop growers who are citizens of the state of Texas residing in Baylor, Brisco, Brown, Cochran, Collingsworth, Dawson, Eastland, Stephens, Erath, Fisher, Gaines, Hall, Hamilton, Haskell, Lamb, and Yoakum counties ("Defendants"). Defendant Sand Farms, Inc., is a citizen of Texas as provided by 28 U.S.C. § 1332(c)(1).

DECLARATORY JUDGMENT

8. This case involves an actual controversy, within the jurisdiction of this Court, and a judicial declaration is necessary regarding the rights and other legal relations

between the plaintiff Dow AgroSciences and the Defendants, as set out below. Therefore, the relief requested by Dow AgroSciences is specifically authorized by 28 U.S.C. § § 2201 and 2202 and Fed. R. Civ. P. 57.

STATEMENT OF FACTS

9. Dow AgroSciences is, among other things, a manufacturer of pest management and biotechnology products. In the Spring of 2000, Dow AgroSciences introduced a new product, Strongarm*, which was used as a preemergence herbicide to control certain weeds in peanuts. Strongarm was introduced in the Southwest of the United States, including within this district.

10. The active ingredient in Strongarm is diclosulam.

11. Strongarm is registered with the United States Environmental Protection Agency ("EPA") pursuant to the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. §§ 136-136y. As part of the initial registration process under FIFRA for the Strongarm herbicide, Dow AgroSciences submitted all scientific data and information required by the EPA. The EPA determined that the data submitted by Dow AgroSciences to the EPA in support of the initial registration of Strongarm herbicide was in compliance with the requirements of FIFRA and registered Strongarm and assigned the registration number 62719-288 on March 8, 2000.

12. As part of the initial registration process for the Strongarm herbicide, Dow AgroSciences received from the EPA a stamped and accepted product label.

---

* Trademark of Dow AgroSciences LLC.

13. At all times relevant hereto, Dow AgroSciences has sold the Strongarm herbicide with labels that were accepted by the EPA and affixed to the product at the time of the sale.

14. The growing season in the Southwest in 2000 was challenging. Yields from peanut crops in Texas and Oklahoma were significantly lower than in previous years due to a severe mid-season drought and late-season rain and snow, which made harvest difficult. Water quality and quantity, as well as other cultural management practices, were also questionable.

15. Upon information and belief, near the end of 2000 counsel for various peanut growers were openly soliciting clients for a mass suit against Dow AgroSciences based on the allegation that the lower-than expected yields from peanut crops in Texas and Oklahoma were caused by and attributable solely to the individual growers' use of Strongarm.

16. Seventy-five individual peanut grower's represented by counsel have sent claim demand letters to Dow AgroSciences. Seventy are named as defendants in this action and in an action filed concurrently with this one in the United States District Court for the Western District of Oklahoma, collectively. Each of the individual Defendants' claims exceeds the $75,000 amount in controversy for purposes of jurisdiction pursuant to 28 U.S.C. § 1332 which includes specific demands for consequential and incidental damages, treble damages, and attorneys' fees and expenses. Combined, their claim demands excluding expenses and attorneys' fees total approximately $40,000,000.

17. The Defendants contend that Strongarm was "highly toxic" and failed to control weeds in their peanut crops. The Defendants also contend that Dow AgroSciences misrepresented the product as being "of a particular s'andard, quality, and grade" and that these

misrepresentations constituted false, misleading and deceptive acts and practices. Further, the Defendants allege false advertising, breach of warranty and statutory claims for alleged deceptive and fraudulent trade practices. The Defendants have demanded payment from Dow AgroSciences for certain damages, including consequential and incidental damages, treble damages and attorneys' fees and expenses.

18. The federally-approved Strongarm label sets forth "Terms and Conditions of Use," "Warranty Disclaimer," "Inherent Risks," and "Limitations of Remedies."

19. Dow AgroSciences contends that upon the individual Defendants' purchase, retention and use of Strongarm, contracts between the individual Defendants and Dow AgroSciences were created, with the text of the federally-approved Strongarm label supplying the terms of those contracts and defining the parties' respective rights and liabilities.

20. Due to the nature of the claims made against Dow AgroSciences, it is clear that the individual Defendants refuse to acknowledge the existence of such contracts and that they further refuse to acknowledge that the text of the federally-approved Strongarm label defines the parties' respective rights, obligations and liabilities upon Strongarm's failure to perform as Defendants claim they expected.

21. The Terms and Conditions of Use section provides that the purchaser should return the unopened package of Strongarm at once for a full refund if the Warranty Disclaimer, Inherent Risks of Use, and Limitations of Remedies are unacceptable to the purchaser. The Terms and Conditions also provide that use of the product constitutes acceptance of the terms of the label.

22. The Warranty Disclaimer provides "that th[e] product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label . . . . The Disclaimer also provides: "Dow AgroSciences makes NO OTHER EXPRESS OR IMPLIED WARRANTY OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY."

23. The Inherent Risks of Use section provides that risks such as crop injury are assumed by the buyer where abnormal conditions, e.g., drought, exist.

24. The Limitation of Remedies section provides as follows:

> The exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:
>
> 1. Refund of purchase price paid by buyer or user for product bought, or
>
> 2. Replacement of amount of product used.
>
> Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential damages or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to

vary or exceed the terms of the Warranty Disclaimer of this Limitation of Remedies in any manner.

25. A controversy exists between Dow AgroSciences and the Defendants regarding the enforceability of these provisions on the federally-approved Strongarm label and the viability of Defendants' claims against Dow AgroSciences.

COUNT I

26. Dow AgroSciences incorporates by reference paragraphs 1 through 25 of its Complaint as if fully set forth herein.

27. Affixed to each container of Strongarm purchased by Defendants was a federally-approved label which contained a "Limitation of Remedies."

28. A limitation of remedies provision, such as the one included on the Strongarm label, is valid and enforceable pursuant to Tex. Bus. & Com. Code Ann. § 2.719.

29. Defendants have asserted a right to recover damages from Dow AgroSciences in an amount which exceeds that permitted by the Limitation of Remedies section in the federally-approved Strongarm label.

30. A justiciable controversy exists between Dow AgroSciences and Defendants regarding the rights and other legal relations of the parties with respect to the remedies available to the Defendants such that a declaration is necessary pursuant to 28 U.S.C. §§ 2201 and 2202.

31. Dow AgroSciences is entitled to a declaration that Defendants' available remedies, if any, are limited to those set forth in the Limitation of Remedies section of the federally-approved Strongarm label.

COUNT II

32. Dow AgroSciences incorporates by reference paragraphs 1 through 31 of its Complaint as if fully set forth herein.

33. Affixed to each container of Strongarm purchased by Defendants was a federally-approved label which contained a "Warranty Disclaimer."

34. A provision, such as the one included on the federally-approved Strongarm label, disclaiming express or implied warranties is valid and enforceable pursuant to Tex. Bus. & Com. Code Ann. § 2.316.

35. Defendants have asserted a right to bring claims for breach of express and implied warranties against Dow AgroSciences.

36. A justiciable controversy exists between Dow AgroSciences and Defendants regarding the rights and other legal relations of the parties with respect to the enforceability of the Warranty Disclaimer such that a declaration is necessary pursuant to 28 U.S.C. §§ 2201 and 2202.

37. Dow AgroSciences is entitled to a declaration that the Warranty Disclaimer section of the label is valid and enforceable.

COUNT III

38. Dow AgroSciences incorporates by reference the allegations contained in paragraphs 1 - 37.

39. Under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. § § 136-136y, all herbicides sold or distributed in the United States must be registered with the Administrator of the Environmental Protection Agency. The EPA also regulates both the design and content of the label for a registered herbicide. The final printed labeling for a herbicide must be submitted and

accepted by the Administrator before registration, and it is unlawful to sell an unregistered herbicide.

40. In determining the rights and legal relations of Dow AgroSciences and Defendants under the contract terms contained in the federally-approved Strongarm product label, this Court will be required to examine principles of federal preemption, which originate from the Supremacy Clause of the United States Constitution (U.S. Const., Art. VI, cl. 2), and issues of federal law and congressional intent, which originate from FIFRA.

41. The responsibility of the EPA to regulate the labeling and registration of herbicide products is inherently federal in character, and the availability of state law remedies with respect to unexpected consequences of use of a federally registered herbicide are governed by and limited by federal law.

42. Defendants have challenged the adequacy and sufficiency of Dow AgroSciences's federally-approved Strongarm product label by alleging claims for damages against Dow AgroSciences under theories of fraud, false advertising, misrepresentation, negligence in design, testing and marketing, breach of express and implied warranty and statutory claims for alleged deceptive and fraudulent trade practices.

43. At all times relevant hereto, Dow AgroSciences has sold the Strongarm herbicide with labels that were accepted by the EPA and affixed to the product at the time of the sale.

44. FIFRA contains an express preemption clause that provides that a state "shall not impose or continue in effect any requirements for labeling and packaging in addition to or different from those required under [FIFRA]." 7 U.S.C. § 136v(b). This provision expressly preempts Defendants' direct and indirect challenges to the adequacy and sufficiency of any EPA-approved herbicide labeling or packaging.

45. Defendants' claims are also impliedly preempted by federal law because they (1) conflict with FIFRA's regulatory scheme and (2) directly conflict with the express authority given to registrants – such as Dow AgroSciences – to "distribute or sell a registered product with the composition, packaging and labeling currently approved by the Agency." 40 C.F.R. § 152.130(a).

46. A justiciable controversy exists between Dow AgroSciences and Defendants regarding the rights and other legal relations of the parties with respect to federal preemption of the Defendants' claims such that a declaration is necessary pursuant to 28 U.S.C. §§ 2201 and 2202

PRAYER FOR RELIEF

For the foregoing reasons, Dow AgroSciences respectfully requests that the Court:

1. Declare that the Defendants' available remedies, if any, are limited to those set forth in the Limitation of Remedies section of the federally-approved Strongarm label; and

2. Declare that the Warranty Disclaimer section of the federally-approved Strongarm label is valid and enforceable;

3. Declare that the Plaintiff's and the Defendants' rights and obligations are governed by the federally-approved Strongarm label and any claims directly or indirectly attacking that federally-approved label, and/or the EPA approved composition of Strongarm, are expressly and implied preempted by federal statute and all regulations promulgated thereunder; and

4. Award any other relief that the Court deems just and proper.

JURY DEMAND

Plaintiff Dow AgroSciences LLC respectfully demands a jury trial on all claims and issues.

Dated: April 15, 2002

Respectfully submitted,

McCLESKEY, HARRIGER, BRAZILL & GRAF, L.L.P.

By: _____
Fernando M. Bustos
State Bar No. 24001819
P.O. Box 6170
Lubbock, Texas 79493
Telephone: (806) 780-3976
Fax: (806) 796-7365

THOMPSON & KNIGHT L.L.P.
Frank L. Hill
State Bar No. 09631500
98 San Jacinto Boulevard
Suite 1200
Austin, Texas 78701-4081
Telephone: (512) 469-6100
Fax: (512) 469-6180

BARNES & THORNBURG
Dean T. Barnhard
Joseph G. Eaton
11 South Meridian St.
Indianapolis, Indiana 46204
Telephone: (317) 236-1313
Fax: (317) 231-7433

ATTORNEYS FOR PLAINTIFF
DOW AGROSCIENCES LLC

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC, Plaintiff,	)	
v.	)	Civil Action No. 5-01CV0331-C
DENNIS BATES, [*et al.*], Defendants.	)	

[Filed Apr. 23, 2002]

DOW AGROSCIENCES' ANSWER TO DEFENDANTS' ORIGINAL COUNTERCLAIM

Dow AgroSciences LLC ("DAS") respectfully submits the following Answer and Affirmative Defenses to Defendants' Original Counterclaim:

Answer

I.

With respect to the allegations contained in the first rhetorical paragraph of Section I of Defendants' Original Counterclaim, DAS admits only that the persons and entities listed in rhetorical paragraph 1 of Section I of Defendants' Original Counterclaim are those persons and entities that attempt to assert a counterclaim against DAS. With respect to the allegations contained in the second rhetorical paragraph of Section I of Defendants' Original Counterclaim, DAS admits only that it is a Delaware Limited Liability Company with a principal place of business in the State of Indiana.

II.

DAS admits that Defendants/Counter-Plaintiffs herein are farmers who now own or in the past have owned and operated lands and peanut farms. DAS denies all remaining allegations that may be set forth in the remainder of the only rhetorical paragraph that comprises Section II of Defendants' Original Counterclaim.

III.

DAS denies all allegations set forth against it in the two rhetorical paragraphs that comprise Section III of Defendants' Original Counterclaim.

IV.

DAS denies all allegations set forth against it in the eight rhetorical paragraphs that comprise Section IV of Defendants' Original Counterclaim.

V.

DAS states that the terms of the Strongarm label speak for themselves. DAS denies all allegations set forth against it in the two rhetorical paragraphs that comprise Section V of Defendants' Original Counterclaim.

VI.

DAS states that the terms of the Strongarm product label speak for themselves. DAS denies all allegations set forth against it in the seven rhetorical paragraphs that comprise Section VI of Defendants' Original Counterclaim.

VII.

DAS is without information at present concerning whether, in fact, each of the Counter-Plaintiffs purchased or applied Strongarm herbicide. DAS denies all remaining allegations set forth against it in the two rhetorical paragraphs that comprise Section VII of Defendants' Original Counterclaim.

VIII.

DAS is without information at present concerning what, if any, statements were made by local Strongarm retailers. DAS is also without information at present concerning whether Counter-Plaintiffs ever relied on any representations whatsoever in connection with the alleged purchase of Strongarm herbicide. DAS denies all remaining allegations set forth against it in the three rhetorical paragraphs that comprise Section VIII of Defendants' Original Counterclaim.

IX.

DAS is without information at present concerning what, if any, statements were made by local Strongarm retailers. DAS is also without information at present concerning whether Counter-Plaintiffs ever relied on any representations whatsoever in connection with the alleged purchase of Strongarm herbicide. DAS denies all remaining allegations set forth against it in the three rhetorical paragraphs that comprise Section IX of Defendants' Original Counterclaim.

X.

DAS denies the allegations set forth against it in the rhetorical paragraph that comprises Section X of Defendants' Original Counterclaim.

XI.

DAS denies the allegations set forth against it in the first rhetorical paragraph that comprises Section XI of Defendants' Original Counterclaim.

XII.

DAS denies the allegations set forth against it in the rhetorical paragraph that comprises Section XII of Defendants' Original Counterclaim.

WHEREFORE, DAS respectfully requests that Defendants/Counter-Plaintiffs take nothing against it by way of their Original Counterclaim, and for all other proper relief.

II.

Affirmative Defenses

1. Defendants' counterclaims against DAS are expressly preempted by the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. § 136, *et seq*.

2. Defendants' counterclaims against DAS are impliedly preempted by FIFRA.

3. Defendants' counterclaims against DAS are preempted because the United States Environmental Protection Agency ("EPA") granted it express permission to distribute and sell its product with the labeling, packaging and composition as approved by the EPA. 40 C.F.R. § 152.130(a).

4. DAS effectively has disclaimed all implied warranties of merchantability or fitness for a particular purpose, together with any other express or implied warranties other than those specifically stated on the product label, subject to the inherent risks of use also disclosed on the product label.

5. DAS effectively has limited available remedies resulting from damages associated with the use of the product to a refund of the purchase price or replacement of the amount of product used, at DAS's sole election.

6. DAS effectively has disclaimed all liabilities for consequential or incidental damages or losses.

7. DAS effectively has precluded any assertion by Defendants of any alleged statement and/or representation and/or agreement made by DAS or any of its agents or representatives as a means to avoid the disclaimers of

warranties and limitations of remedies stated on the product label.

8. Defendants' counterclaims are precluded by the economic damages rule.

9. Defendants' alleged damages were proximately caused or materially contributed to by Defendants' own actions and/or negligence or the actions and/or negligence of Defendants' agents or representatives.

10. Defendants' alleged damages were proximately caused or materially contributed to by the actions and/or negligence of party(ies) and/or individual(s) over whom DAS had no control or right of control.

PRAYER

WHEREFORE, DAS respectfully requests that Defendants/Counter-Plaintiffs take nothing against it by way of their Counterclaim, and for all other proper relief.

Respectfully submitted,

By: /s/ Fernando M. Bustos
Fernando M. Bustos
Texas Bar #24001819
McCLESKEY, HARRIGER,
BRAZILL & GRAF, L.L.P.
P.O. Box 6170
Lubbock, Texas 79493
Telephone: (806) 796-7300
Telecopier: (806) 796-7365

Frank L. Hill
Texas Bar #09631500
THOMPSON & KNIGHT
1200 San Jacinto Center
98 San Jacinto Boulevard
Austin, TX 78701-4081
Phone: (512) 496-6100
Fax: (512) 496-6180

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

[Filed June 14, 2002]

DEFENDANTS' MEMORANDUM IN SUPPORT OF MOTION FOR RECONSIDERATION OF SUMMARY JUDGMENT

Respectfully submitted,

PHIL WATKINS, P.C.
One Riverwalk Place, Suite 1750
700 N. St. Mary's Street
San Antonio, Texas 78205
Telephone: (210) 225-6666
Telecopier: (210) 225-2300

BY: /s/ Phil Watkins
PHIL WATKINS
State Bar No. 20927400

JOHN SIMPSON
SPLAWN & SIMPSON, INC.
907 Texas Avenue
P.O. Box 1376
Lubbock, Texas 79408-1376
Telephone: (806) 765-8048
Telecopier: (806) 765-5308

ATTORNEYS FOR DEFENDANTS

[Text Omitted, Exhibits Excerpted]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action
	)	No. 5-01CV0331-C
DENNIS BATES, [*et al.*],	)	
	)	
Defendants.	)	

AFFIDAVIT OF JOHN M. BROWN, Ph.D.

THE STATE OF MISSOURI

COUNTY OF BOONE

Before me, the undersigned notary public, on this day personally appeared JOHN M. BROWN, PH.D., who, after being on his oath duly sworn, deposed as follows:

1. My name is John M. Brown. I am over the age of 21 years and I am competent to make this affidavit. I have never been convicted of a felony and I have personal knowledge of the facts stated herein due to my education, training, experience and personal viewing. All of the facts stated in this affidavit are true and correct.

2. My address is 7900 O'Neal Road, Columbia, Missouri 65202. I have a Bachelor of Science in Agriculture Business from East Texas State University, a Masters of Science Degree in Floriculture from Texas A&M University and a Doctorate Degree in Horticulture from North Carolina State University. In my undergraduate and graduate education I took courses in general horticulture, orchard management, plant

physiology, plant nutrition, plant entomology and plant pathology. During the course of my graduate education, I conducted field investigations including the evaluation and analysis of herbicide damage upon plants under the direction of Dr. Ed McWilliams at Texas A&M University.

3. After receiving my doctorate degree in horticulture in 1987, I was employed with the University of Missouri and the Missouri Agricultural Extension Service. My duties included giving horticulture advice and assistance to farmers and growers. I taught courses on plant disorders to growers and performed on-site consultations with growers, chemical companies and the Missouri Agricultural Extension Service.

4. From January, 1989 to August, 1993, I was an assistant professor of horticulture in the Department of Plant Science at the University of Missouri-Columbia. My duties included working with the Agricultural Extension Service and working with the plant laboratory studying plant disorders. As a part of my study in the plant laboratory studying plant disorders, we evaluated and analyzed herbicide damage upon plants in a laboratory and farm setting. I also taught classes at the University of Missouri in Horticulture.

5. In September, 1993, I founded Agricultural Investigation and Research Corp. (AIR, Corp.). AIR, Corp. serves as a consultant in the investigation of plant disorders chiefly related to pesticide and herbicide damage. AIR, Corp. is located at 7900 O'Neal Road, Columbia, Missouri.

6. When asked to determine the causes of plant disorder in peanut crops, I have been taught in my undergraduate and graduate education to begin with the history of the peanut farms which includes oral information from the farm owner, manager and other persons who are familiar with the farm and the accumulation of written information concerning the soils,

irrigation water, horticulture practices, including fertilizer program, weed management program, pesticide program, fungicide program, general farm management and peanut production. After gathering this information, I conduct a visual inspection of the farm to observe any symptoms upon the peanut plants. The inspection of the peanut farm includes gathering peanut plants, soil and water for laboratory analysis, taking photographs and video of the farm, plants and farm operations. On the peanut plant itself, I will examine the leaves, stem, seed and roots. The investigation inspection methods which I have outlined above have been taught to me in the various horticulture courses that I have taken in my undergraduate and graduate education.

7. Based on my study of the Dow AgroSciences LLC herbicide Strongarm together with research that I have done with its label instructions together with my studies, I am familiar with it's mode of action. The active ingredient in Strongarm is diclosulam. Diclosulam is a member of the Triazolopyrimidine sulfonanilide family of herbicides. The mode of action for diclosulam in plants is the inhibition of the enzyme acetolactate synthase (ALS). This enzyme catalyzes the first step in branch-chain (essential) amino acid biosynthesis. This pathway leads to the synthesis of valine, leucine and isoleucine and is unique in plants. Blocking this pathway deprives the plant of these essential amino acids, thus interferes with DNA synthesis and cell growth leading to plant destruction. ALS herbicides are absorbed by the roots, shoots and foliage and translocate throughout the plant in the xylem and phloem. ALS herbicides accumulate in the meristematic growing points of the plant such as the apical buds at the tips of roots, shoots leaf axils and reproductive structures. Inhibition of plant growth will occur rapidly but visible symptoms of plant response may not show up for one to three weeks depending on the plant species, soil activity and environmental conditions.

8. Beginning in the spring of 2001, I was contacted by numerous farmers and peanut growers with complaints that their 2001 crops of wheat, corn and cotton were not growing in a normal fashion following the use of Strongarm in the growing year 2000 for peanuts. As I began to evaluate these complaints, the farmers and growers provided me with photographs, videotapes and verbal descriptions of the appearance of their 2000 peanut plants and crops. In addition, I visited Comanche Horizon Corporation's farm in Gaines and Andrews Counties and visited at least twenty farms in Oklahoma. The physical description of plant injury was similar in west Texas and in Oklahoma. The photographs and videotape taken of peanuts from various west Texas farms and Oklahoma farms were similar. The descriptions and physical appearance of injury to peanut plants included severe growth inhibition, crop yellowing (chlorosis), root injury, root necrosis (death), severe stunting of the plant throughout the growing season, failure of the peanuts to overlap in the rows and reduced yield and production.

9. Based on my research, typical soil and water pH in the peanut farming regions of west Texas is 7.0 and above. There is good scientific evidence which I believe suggests that injury to the 2000 peanut crop resulted from high pH of the soil and irrigation water causing a greater availability of diclosulam in the plant-root environment.

10. As part of my efforts to determine what information, studies or data Dow AgroSciences LLC had submitted to the Environmental Protection Agency (EPA), I contacted the EPA. I spoke with Jim Tompkins, Product Manager 25, Herbicide Branch, Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460. Mr. Tompkins is the product registration representative for diclosulam, which is the active ingredient in Strongarm®. I have been attempting since February, 2002 to gather information from the EPA about

Dow AgroSciences LLC's submission of efficacy studies, data and phytotoxicity studies to the EPA but have been unable to get this information until June 11, 2002. When I spoke with Mr. Tompkins about any submission of data or studies to the EPA, he informed me that Dow AgroSciences LLC had not submitted any target area phytotoxicity studies or data on peanuts treated with diclosulam (Strongarm®). He further told me that EPA did not require Dow AgroSciences LLC to submit data concerning target area phytotoxicity for peanuts. He told me that the EPA had chosen not to require submission of studies and data relating to the efficacy of products including Strongarm®. Efficacy refers to how well a product works. Mr. Tompkins informed me that the EPA did not evaluate whether diclosulam (Strongarm®) had a toxic effect on peanut plants. On my own I verified this fact through review of filings with the EPA that Dow AgroSciences LLC did not submit any data or studies to the EPA on whether diclosulam (Strongarm®) had a toxic effect on peanut plants.

Further Affiant sayeth naught.

/s/ John M. Brown
JOHN M. BROWN, PH.D.

[Notary Omitted]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	[Stamp Omitted]
	)	
Plaintiff,	)	
v.	)	Civil Action No.
	)	5-01CV0331-C
DENNIS BATES, *et al.*,	)	
	)	
Defendants.	)	

[Filed July 5, 2002]

PLAINTIFF DOW AGROSCIENCES LLC'S RESPONSE TO DEFENDANTS' MOTION FOR RECONSIDERATION

Respectfully submitted,

Fernando M. Bustos
State Bar No. 24001819
McCleskey, Harriger,
Brazill & Graf, L.L.P.
P.O. Box 6170
Lubbock, Texas 79493
Telephone: (806) 780-3976
Telecopier: (806) 796-7365

FRANK L. HILL
State Bar No. 09631500
Thompson & Knight
1200 San Jacinto Center
98 San Jacinto Boulevard
Austin, TX 78701-4081
Phone: (512) 496-6121
Fax: (512) 496-6180

ATTORNEYS FOR PLAINTIFF
DOW AGROSCIENCES LLC

[Text Omitted, Exhibits Excerpted]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. 5-01CV0331-C
	)	
DENNIS BATES, *et al.*,	)	
	)	
Defendants.	)	

AFFIDAVIT OF JOHN J. JACHETTA, Ph.D.

John J. Jachetta, Ph.D., being duly sworn, deposes and says:

1. My name is John J. Jachetta. I am an adult, over the age of 21 years and I am competent to testify as to all matters stated herein.

2. I am employed by Dow AgroSciences LLC ("Dow AgroSciences") as Regulatory Leader in Regulatory Success - Americas. From September 1997 to March 2000, I was the Registration Manager for, among others, Strongarm• herbicide. I am familiar with the facts and circumstances discussed herein, which are based upon personal knowledge and upon review of business records of Dow AgroSciences.

3. As Registration Manager for Strongarm herbicide, I was responsible for all matters concerning the federal registration of Stongarm herbicide pursuant to the Federal Insecticide, Fungicide and Rodenticide Act

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• Trademark of Dow AgroSciences LLC.

("FIFRA"). I am familiar with the regulations promulgated and enforced pursuant to FIFRA by the Environmental Protection Agency ("EPA") and other applicable federal laws and regulations.

4. My responsibilities as Registration Manager included assuring that Dow AgroSciences fully complied with applicable EPA requirements and regulations concerning the federal registration of Strongarm herbicide.

5. The EPA accepted the product label for Strongarm herbicide on March 8, 2000, and assigned registration number 62719-288. Attached hereto as **Exhibit A** is a true and accurate stamped copy of the EPA's acceptance and the accepted product label. The acceptance was conditioned upon Dow AgroSciences submitting the data listed therein, which Dow AgroSciences thereafter submitted.

6. At all times relevant hereto, Dow AgroSciences sold Strongarm herbicide only with EPA-accepted labels affixed to the product at the time of the sale. A true and accurate copy of the product label in effect during the time period relevant to the claims involved in the above-referenced lawsuit bears Label Code D02-044-003 and is attached hereto as **Exhibit B**.

7. By its acceptance of the product label for Strongarm herbicide, the EPA determined that the data submitted by Dow AgroSciences in support of its registration complied with all FIFRA requirements.

8. Title 40, Section 158 of the Code of Federal Regulations provides a sampling of some of the areas with respect to which registrants submit data to the EPA in connection with the registration of herbicides. Among those areas include: residue chemistry (40 C.F.R. §158.20(c), §158.202(c) & -.240), environmental fate (40 C.F.R. §158.202(d) & -.290), non-target organisms and plant protection (40 C.F.R. §158.202(h) & -.540), and product performance (40 C.F.R. §158.202(i)).

9. The FIFRA Section 3 registration application for Strongarm herbicide and its active ingredient, diclosulam, was made under what is commonly called the Reduced-Risk Initiative. The criteria for the Reduced-Risk Initiative are published on September 4, 1997 in Pesticide Registration Notice 97-3, entitled "Guidelines for Expedited Review of Conventional Pesticides under the Reduced-Risk Initiative and for Biological Pesticides." EPA's priorities for expedited review are further detailed in PR-Notice 98-7.

10. To initiate the Reduced Risk review process, an applicant must submit an application called a Reduced Risk Rationale before and in addition to what the EPA requires in the FIFRA Section 3 data package. The Reduced Risk Rationale must demonstrate how the use of the pesticide may reasonably be expected to accomplish one or more of the criteria listed in FIFRA Section 3(c)(10). Included in those criteria is the "reasonable expectation" that a pesticide may: (1) reduce the risks of pesticide to non-target organisms; (2) reduce the potential of contamination of environmental resources; or (3) make pest management strategies more effective.

11. Reduced Risk Rationales must fully address all of the following areas: (a) executive summary, (b) human health effects; (c) environmental fate and effects; (d) other hazards; (e) risk discussion (f) pest resistance and management (e.g., IPM); (g) comparative performance (efficacy), and (h) other information and how application complies with FQPA.

12. Because Strongarm herbicide was submitted for registration pursuant to the Reduced-Risk Initiative and pursuant to the specific data requirements outlined in 40 CFR §158.540, the EPA required all of the above-referenced materials, including efficacy and terrestrial plant phytotoxicity/injury.

13. Pursuant to Section VII of PR-Notice 97-3, the "comparative performance data" in the Reduced Risk Rationale is, in fact, efficacy data. The EPA reviews such efficacy data to assure that risk reduction has a reasonable opportunity to be accomplished by adoption of the new pesticide by growers. There are two types of data that satisfy the Section G efficacy requirements: (1) Summaries of comparative performance data in which the performance of the candidate pesticide is compared to that of alternative control measures under actual-use or simulated actual-use conditions; and (2) Summaries of the available efficacy data if comparative performance data are not available. EPA requires data summaries to include statistical analysis of significant differences between the new pesticide and the commonly used alternatives. Dow AgroSciences' Reduced Risk Rationale included both types of data summaries.

14. Based upon my 7 years dealing with the EPA, my regulatory experience, and EPA guidelines, the EPA uses phytotoxicity/plant injury data to assess the potential hazard of pesticides on nontarget plants including crops, ornamentals and others that are intentionally sprayed or exposed outside of the area of intended application. More specifically, guidelines for EPA Pesticide Assessment, Subdivision J 122-1 and 123-1 seed germination/seedling emergence and vegetative vigor tests evaluate ten plant species, including 6 dicot species representing four plant families and four monocot species representing two plant families. The list of ten test species is required to contain corn as a representative monocot, soybeans as a representative legume dicot as well as a dicot root crop species; the remaining seven species are assembled from plant families containing commonly grown crop plants. The distribution species is representative of crop species in the agricultural environment.

15. Dow AgroSciences submitted plant phytotoxicity/ crop injury and environmental fate data, along with the

above-referenced data and efficacy studies. By way of example, Dow AgroSciences' submission to the EPA for diclosulam included studies evaluating the effects of Strongarm on Seedling emergence and vegetative vigor of non-target terrestrial plants, the phytotoxicological effects of Strongarm and its soil degradates. The Dow AgroSciences' submission to the EPA also included an ecological risk assessment, a study examining the magnitude of residue in processed products of peanuts, the reasonable grounds in support of the petition for the establishment of a tolerance for diclosulam on peanut nutmeat, the magnitude of residues of Strongarm in peanuts, and a summary of the environmental fate of Strongarm.

FURTHER, the affiant sayeth not.

Dated: July 1, 2002

/s/ John J. Jachetta
John J. Jachetta, Ph.D.

[Notary Omitted]

EXHIBIT A

[EPA Notice of Registration – reproduced at pp. 63-93, *supra*]

EXHIBIT B

[Dow AgroSciences Specimen Label for Strongarm – reproduced at pp. 94-112, *supra*]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
LUBBOCK DIVISION

[Stamp Omitted]

DOW AGROSCIENCES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No.
	)	5-01CV0331-C
DENNIS BATES, *et al.*,	)	
	)	
Defendants.	)	

ORDER GRANTING PLAINTIFF DOW AGROSCIENCES LLC'S MOTION FOR RETURN OF FUNDS INVESTED IN REGISTRY OF COURT

Before this Court is Plaintiff Dow AgroSciences LLC's Motion for Return Of Funds Invested In Registry Of Court And Brief In Support. After considering all relevant arguments and evidence, the Court **GRANTS** Plaintiff's motion.

Plaintiff Dow AgroSciences has previously tendered the following funds for deposit into the registry of the Court with the Court Registry Investment System (CRIS), administered through the United States District Court for the Northern District of Texas, as custodian:

Dennis Bates	$1,653.44
Jimmy Burson	$1,417.20
Benny Judah/Clearwater Farms, Inc.	$2,834.46
Tommy Coleman	$9,520.00
Richard Cox	$ 712.26
Wayne Davis	$2,834.46
Burk Denman	$1,542.40

Neil Friessen	$3,769.20
Jake Froese	$1,884.60
Thomas Fuston	$9,200.00
Arthur Galvan/G-5 Partnership	$4,240.35
Greg Hughes	$ 942.30
Sandra Hughes/Karl Don Hughes/ JH Cattle Co.	$1,884.60
Rudy Klassen	$ 708.62
Ronnie Love	$3,732.04
Kevin Mathis	$1,189.12
Brad Palmer	$4,724.10
Jerry Parrish	$2,883.60
JoEvelyn Patterson/Donald Gruben/ Sheila Gruben/ Gruben Farms	$2,362.05
Stacy Price	$2,760.00
Benny Judah/Progressive Farms	$2,834.46
Morris Rushing/Pea-Cot Farms	$3,015.90
Billy Shannon	$2,055.38
Craig West	$1,872.00
Frenchie Lee Wheeler	$ 708.62

IT IS THEREFORE ORDERED that the Clerk of the Court issue a check payable to Dow AgroSciences LLC which represents a refund of the monies listed above, together with any accrued interest. The Clerk shall tender Dow AgroSciences LLC's refund check to its attorney of record, Mr. Fernando M. Bustos.

IT IS FURTHER ORDERED that CRIS is authorized and directed to deduct the proper registry fee determined on the basis of the rates published by the Director of the Administrative Office, as approved by the Judicial Conference.

SIGNED this 4th day of November, 2003.

/s/ Sam R. Cummings
SAM R. CUMMINGS
UNITED STATES DISTRICT JUDGE

[Seal Omitted]

U.S. Environmental Protection Agency

Pesticides: Regulating Pesticides

Pesticide Registration (PR) Notice 96-4

June 3, 1996

Pesticide Registration (PR) NOTICE 96-4

NOTICE TO MANUFACTURERS, PRODUCERS, FORMULATORS, AND REGISTRANTS OF PESTICIDE PRODUCTS

ATTENTION: Persons Responsible for Federal Registration and Reregistration of Pesticide Products

SUBJECT: Label Statements Involving Product Efficacy and Potential for Harm to Property

I. INTRODUCTION

This notice explains EPA procedures in approving pesticide labels that include claims relating to the efficacy of agricultural pesticides and provides a warning to growers regarding reliance on label statements regarding pesticide efficacy. EPA is issuing this notice at this time to correct a misunderstanding regarding the FIFRA label approval process and efficacy claims that is reflected in a series of court decisions concerning the preemptive effect of FIFRA.

II. LEGAL FRAMEWORK

A. Registration and the Label Approval Process

EPA approves pesticide labels in the process of registering a pesticide under FIFRA. FIFRA specifies that EPA shall register a pesticide if:

(1) its composition is such as to warrant the proposed claims for it;

(2) its labeling and other material required to be submitted comply with the requirements of this Act;

(3) it will perform its intended function without unreasonable adverse effects on the environment; and

(4) when used in accordance with widespread and commonly recognized practice it will not generally cause unreasonable adverse effects on the environment.

7 U.S.C. 136c (c) (5). Although the first registration requirement identified above mandates that EPA consider efficacy of label claims, Congress, in 1978, explicitly gave EPA the authority to waive that requirement. FIFRA states:

> In considering an application for the registration of a pesticide, the Administrator may waive data requirements pertaining to efficacy, in which event the Administrator may register the pesticide without determining that the pesticide's composition is such as to warrant proposed claims of efficacy.

7 U.S.C. 136c(c)(5). The legislative history explains that Congress believed that product performance issues for agricultural pesticides were adequately addressed by information from government and university sources and market forces:

> This authority [to waive efficacy data] will be used most commonly with respect to agricultural pesticides, due to the high level of knowledge concerning pesticidal efficacy that prevails in the agricultural community, the existence of means for communicating efficacy information to users, the organizational expertise of the Department of Agriculture, the extension services, and the universities in this area,

and the stake the industry has in marketing products that are efficacious.

S. Rpt. 95-334, 95th Cong., 1st Sess. 20 (July 6, 1977).

EPA has acted under this authority to waive, by regulation, data requirements as to efficacy issues for all agricultural pesticides. 44 Fed. Reg. 27932, 27938 (col. 3) (May 11, 1979); 40 CFR 158.640(b)(1); see also 47 Fed. Reg. 57624 (December 27, 1982). EPA concluded that agriculture pesticides are "effectively regulated by the marketplace," 44 Fed. Reg. 27932, 27938 (col. 3) (May 11, 1979), and that waiving review of the efficacy of agricultural pesticides in the registration process would enable the Agency to focus of its "primary mandate under FIFRA": investigating "the health and safety aspects of pesticides." 47 Fed. Reg. 53192 (November 24, 1982); 47 Fed. Reg. 40659, 40661 (col.1) (September 15, 1982). EPA pointed to private legal actions for damages as one factor that would ensure that pesticide manufacturers sold an efficacious product: "pesticide producers are aware that they are potentially subject to damage suits by the user community if their products prove ineffective in actual use." 47 Fed. Reg. 40659, 40661 (col.2) (September 15, 1982).

EPA has also, by regulation, promulgated various requirements pertaining to pesticide labels. These regulations bar the registration of any pesticide with a misbranded label, 40 C.F.R. 152.112(f), and contain specific examples of label statements that are considered false or misleading and thus render a label misbranded. 40 C.F.R. 156.10(a)(5). Additionally, the regulations have requirements for warning statements and mandate that pesticide products have adequate use directions. 40 C.F.R. 156.10(h) and (i).

B. State Preemption Under FIFRA

FIFRA permits states broad authority to regulate pesticides but makes it unlawful for states that undertake such regulation to "impose or continue in effect any requirements for labeling or packaging in addition to or different from those required under this Act." 7 U.S.C. 136v(b). A number of federal court decisions have held that this preemption of state authority as to pesticide labels bars damage claims in state court by growers against pesticide manufacturers. The courts have reasoned that allowing such a claim by a grower would be, in effect, permitting the state to impose label requirements "in addition to or different from" the federally-approved label.

III. LABEL APPROVAL AND PESTICIDAL EFFICACY

There have been several recent preemption decisions involving claims by growers concerning pesticidal efficacy or property damage caused by a pesticide. For example, in Taylor Ag Industries v. Pure-Gro, 54 F.3d 555 (9th Cir. 1995), several growers sued the manufacturers and distributor of a pesticide that the growers alleged had damaged their cotton crop even though they had applied the pesticide according to the label directions. The court denied the growers' claims on the ground that allowing recovery of damages would interfere indirectly with EPA's "rigorous label-approval process." Id. at 560. In Welchert v. American Cyanamid, Inc., 59 F.3d 69 (8th Cir. 1995), and Worm v. American Cyanamid, Inc. 5 F.3d 744 (4th Cir. 1993), growers sued a pesticide manufacturer seeking recovery for harm to crops allegedly caused when the manufacturer's herbicide remained in the soil and damaged rotated crops. Both courts dismissed the growers' claims noting that EPA's labeling regulations required instructions on rotational crop restrictions. The courts reasoned that to permit such lawsuits "would be to allow state courts to sit, in effect, as super-EPA review

boards that could question the adequacy of the EPA's determination of whether a pesticide registrant successfully complied with the specific labeling requirements of its own regulations." Welchert, 59 F.3d at 73; Worm, 5 F.3d at 749.

These court decisions are based on the premise that, in approving labels for agricultural pesticides, EPA examines, or at least has the obligation to examine, the efficacy of the pesticide and related issues such as the potential for the pesticide to cause property damage. The courts, however, have not taken into account the plain language of the statute on this issue and have misinterpreted the thrust of EPA's regulations. As noted above, in actual fact, EPA, with Congress' approval, stopped evaluating pesticide efficacy for routine label approvals almost two decades ago. Further, as explained below, EPA's regulations do not require a review of efficacy of property damage issues for agricultural pesticides.

EPA's labeling regulations must be interpreted in light of the statutory requirements for registration and EPA's waiver of the requirement for efficacy data on agricultural pesticides. Because efficacy data is not reviewed as part of the registration of agricultural pesticides, it would be incorrect to contend that the label approval process involves an examination of the efficacy of the pesticide. Rather, the label approval process is centered on the issue of the whether label, including the specification of use sites and the directions for use on the label, meets the core requirement for registration: that the pesticide not cause "unreasonable adverse effects on the environment." That term is defined as "any unreasonable risk to man or the environment . . . ." 7 U.S.C. 136(bb). Accordingly, the primary focus in the label approval process for agricultural pesticides involves assessing and regulating the potential risks to humans and the environment posed by such pesticides.

To this end, EPA applies the requirements in its labeling regulations with an eye to risk not efficacy issues. This is illustrated by how EPA applies label requirements regarding pesticide use sites and directions for the use of pesticides including directions concerning rotational crops. Label regulations require that pesticide use sites (e.g., specific crops, animals, etc.) be listed on the label because assessment of the dietary risk of pesticides is based on the foods that legally may contain the pesticide, and, under FIFRA, the label establishes the legal limits on use of a pesticide. 7 U.S.C. 136j(a)(2)(G). Use sites are not reviewed as to the pesticide's efficacy for those crops. The label regulations address the directions for use of a pesticide for the purpose of insuring that pesticide applicators and farmworkers are adequately protected. Additionally, directions for use establish legal limits as to the amounts of pesticide that may be applied and thus allow EPA to control and estimate dietary exposure. EPA does not check to see whether application equipment mentioned in directions for use will be harmed or whether other property damage might occur. For example, the label regulations on directions for use specify that rotation crop restrictions are required when needed "to prevent unreasonable adverse effects upon the environment." 40 C.F.R. 156.10(i)(2)(x). Such restrictions are needed for certain pesticides to prevent uptake of residual pesticide residues from the soil into crops for which the pesticide is not registered. EPA's concern is that the consumption of the rotated crop would increase dietary exposure to the pesticide residue. Rotational crop restrictions are not reviewed to determine if the rotated crop would be injured by the residual pesticide residues.

An additional requirement for registration, noted above, is that the pesticide's labeling comply with the Act. Separately, EPA, by regulation, has required that labeling not be misbranded. 40 C.F.R. 152.112(f). However, these registration requirements should not be read as reintroducing efficacy concerns into the label approval

process. Having directly given EPA the authority to disregard efficacy issues, Congress could not have intended that, once EPA exercised this authority, the same efficacy issues would come in through the back door of the label approval process. Under the statute and its regulations, EPA still must determine in registering a pesticide if the pesticide's label complies with FIFRA or is misbranded but, unless EPA reinstates the requirement to submit efficacy data (either generally or with regard to a particular pesticide), that compliance and misbranding inquiry will generally not extend to the evaluation of the efficacy of the pesticide.

Efficacy and property damage issues are at times relevant to the continued registration of a pesticide. FIFRA's "unreasonable adverse effects" standard requires EPA to take into account "economic, social, and environmental costs and benefits of the use of any pesticide." 7 U.S.C. 136(bb). A pesticide's efficacy and its potential to cause property damage are factors to be considered in determining the economic benefit a pesticide provides to farmers. However, in light of EPA's waiver of the efficacy data requirement for initial registration, these issues would generally only arise following the registration of the pesticide, including approval of the pesticide label. For example, if a pesticide manufacturer were to learn that one its registered pesticides was causing property damage, the manufacturer would be obligated to report that information under section 6(a)(2) of the statute. 7 U.S.C. 136c(a)(2). Additionally, if EPA discovers new risk concerns with an already-registered pesticide, it might examine efficacy data with regard to the pesticide in making an evaluation under the unreasonable adverse effects standard to determine if the product's registration should be cancelled or suspended.

IV. CONCLUSION

EPA hopes this Notice will be useful to courts, the regulated community, and pesticide users. EPA believes this Notice should be helpful to courts in preemption cases that involve EPA's labeling regulations. For example, some courts have mistakenly assumed that EPA's labeling regulations concerning the directions for use of a pesticide have an efficacy component. Further, other courts have erroneously concluded that because a pesticide label contained warnings regarding property damage that EPA had necessarily evaluated such warnings and found them to be truthful and adequate. As to registrants and applicants for registration, this Notice is intended to confirm that EPA has not altered its regulation relating to the waiver of efficacy data requirements for the registration of agricultural pesticides. Finally, as to pesticide users this Notice is intended to clarify that EPA's approval of a pesticide label does not reflect any determination on the part of EPA that the pesticide will be efficacious or will not damage crops or cause other property damage.

Daniel M. Barolo
Director, Office of Pesticide Programs

[Seal Omitted]

U.S. Environmental Protection Agency

Pesticides: Regulating Pesticides

Pesticide Registration (PR) Notice 97-3

September 4, 1997

Pesticide Registration (PR) Notice 97-3

NOTICE TO MANUFACTURERS, FORMULATORS, PRODUCERS AND REGISTRANTS OF PESTICIDE PRODUCTS

ATTENTION: Persons Responsible for Registration of Pesticide Products

SUBJECT: Guidelines for Expedited Review of Conventional Pesticide under the Reduced-Risk Initiative and for Biological Pesticides

I. PURPOSE

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as amended by the Food Quality Protection Act of 1996 (FQPA) requires the Environmental Protection Agency (EPA) to develop procedures and guidelines for expedited review of any pesticide. These procedures and guidelines must be in place within one year after the date of enactment of the FQPA (by August 3, 1997). EPA has already established a Reduced Risk Initiative for conventional pesticides, has formed the Biopesticides and Pollution Prevention Division to review biological pesticides and has established the Antimicrobial Division to review antimicrobial pesticides. The purpose of this PR Notice is to provide the process and criteria to guide applicants in developing their submissions to these programs.

This PR Notice supersedes the reduced-risk criteria published in Federal Register Notices 57 FR 32140, July 20, 1992 and 58 FR 5854, January 22, 1993 and PR Notice 93-9, July 21, 1993. In addition, it defines the types of pesticide products reviewed by the Biopesticides and Pollution Prevention Division and describes how an applicant can apply for biochemical pesticide classification.

The goal of the Reduced-Risk Pesticide Initiative and the Biopesticides and Pollution Prevention Division is to encourage the development, registration and use of lower-risk pesticide products which would result in reduced risks to human health and the environment when compared to existing alternatives. The major incentive which EPA offers for these pesticides is expedited registration review. The major goal of the Antimicrobial Division is to provide expedited review of all types of antimicrobial registration actions.

II. APPLICABILITY

This notice applies to all applicants for initial registration and amended registration for conventional pesticides, as described more fully in Sections IV-X, and for biological pesticides, as described in Section XI. The term "conventional pesticides" as used in this notice includes all pesticides other than biological pesticides and antimicrobial pesticides (as defined in FQPA). Since certain pesticide products, such as wood preservatives and antimicrobials, are not defined as antimicrobial products in FQPA but are handled in the Antimicrobial Division, for the purposes of this notice they are considered conventional pesticides.

III. EFFECTIVE DATE

This PR Notice is effective immediately.

IV. BACKGROUND ON THE REDUCED-RISK INITIATIVE

In July 1992, the Office of Pesticide Programs (OPP) published a Federal Register notice announcing the need for incentives for the development and registration of reduced-risk pesticides. In a subsequent Federal Register notice (January 1993) OPP announced the initiation of the Reduced-Risk effort, and in July 1993 OPP published PR Notice 93-9 which provided interim reduced-risk criteria and guidance for submissions.

Since July 1993, applicants have sent thirty-nine new chemical or new use submissions to OPP for consideration as reduced-risk pesticides. Of the thirty-nine, twenty-two have been accepted by OPP as reduced-risk candidates; and sixteen have been rejected. Of the twenty-two accepted reduced-risk submissions, fourteen have been registered. The following is a list of the registered pesticides by accepted common names (if available) and their trade name (in parenthesis):

(1) Hexaflumuron (Recruit) – below ground bait station termiticide

(2) Flumiclorac-pentyl (Resource) – post emergent herbicide on corn, soybeans

(3) Methyl Anthranilate (Rejex-It) – bird repellent on cherries, grapes, blueberries, forestry

(4) Tebufenozide (Confirm) – insecticide on walnuts

(5) Hymexazol (Tachigaren) – fungicide seed treatment on sugar beets

(6) Fludioxonil (Maxim) – fungicide seed treatment on corn, sorghum

(7) (Cadre) – herbicide on peanuts

(8) (Mefenoxam) – fungicide on multiple crops

(9) Spinosad (Spinosad) – insecticide on cotton

(10) Azoxystrobin (Heritage) – fungicide on turf

(11) Alpha-Metolachlor (CGA 77102) – herbicide on multiple crops.

(12) Hexaflumuron (Recruit) – above ground bait station new use termiticide

(13) Imazamox (Raptor) – herbicide on soybeans

(14) Azoxystrobin (Heritage) – fungicide on grapes, bananas, peaches, tomatoes, pecans and peanuts

The major advantage for reduced-risk pesticides is expedited registration review. For FY95 and FY96 (prior to the passage of FQPA in August 1996) the average total time required to register a new conventional pesticide was thirty-eight months. For reduced-risk pesticides the average total time for registration was only fourteen months. Since passage of FQPA three new AI, reduced-risk pesticides were registered in seventeen, eighteen and seventeen months, somewhat longer than the pre-FQPA average but still substantially shorter than the conventional pesticide times. The faster registration times reflect, in part, the expedited review status granted reduced-risk actions. Not only is the initial submission granted a high review priority but also any resubmission that may be necessary.

If the applicant is simultaneously seeking registration in Canada, and if the application has been determined by Canada to be complete, the reduced-risk action can also qualify for work-sharing between the two countries. While this work-sharing program is still in the "pilot" stage, it could result in further reduced review times and greater harmonization.

V. CHARACTERISTICS OF ACCEPTABLE AND UNACCEPTABLE SUBMISSIONS FOR THE REDUCED-RISK INITIATIVE

OPP has assessed fourteen of the twenty-two reviews conducted by the Reduced Risk Committee of submissions that were determined to be reduced-risk. Those factors that most significantly contributed to EPA's decision to grant reduced risk status are summarized below in descending order:

- human health effects
  - very low mammalian toxicity
  - toxicity generally lower than alternatives (10-100X)
  - displaces chemicals that pose potential human health concerns [e.g., organophosphates (OPs), probable carcinogens (B2s)]
  - reduces exposure to mixers, loaders, applicators and reentry workers
- non-target organism effects (birds)
  - very low toxicity to birds
  - very low toxicity to honeybees
  - significantly less toxicity/risk to birds than alternatives not harmful to beneficial insects, highly selective pest impacts
- non-target organism effects (fish)
  - very low toxicity to fish
  - less toxicity/risk to fish than alternatives
  - potential toxicity/risk to fish mitigatable
  - similar toxicity to fish as alternatives but significantly less exposure
- groundwater (GW)
  - low potential for GW contamination
  - low drift, runoff potential
  - runoff mitigatable

- lower use rates than alternatives, fewer applications
- low pest resistance potential (i.e., new mode of action)
- highly compatible with IPM
- efficacy.

OPP has also assessed eleven of the sixteen reviews conducted by the Reduced Risk Committee of submissions that were determined not to be reduced-risk. Those factors that most significantly contributed to an unacceptable decision by the committee are summarized below in descending order:

- human health effects
  - inadequate/inappropriate comparisons with alternatives
  - inadequate documentation of effects
  - human health risk reduction case weak
  - risk reduction case inadequate when compared to alternatives
- non-target organism effects (birds and fish)
  - toxic to birds
  - toxic to fish
  - risk reduction case inadequate when compared to alternatives
- potential GW problems
- unlikely to displace higher risk alternatives
- lack of efficacy data
- phytotoxicity.

This survey of past decisions should assist future applicants in preparing their submissions.

VI. PROCEDURES AND GUIDELINES FOR EXPEDITED REVIEW OF CONVENTIONAL AND ANTIMICROBIAL PESTICIDES

A. Background

In general, FIFRA section 3(c)(3)(A) requires EPA after receipt of an application for registration of a pesticide "as expeditiously as possible" either to register it or to notify the applicant that the application does not comply with the Act. FIFRA also establishes expedited review procedures for a variety of Agency activities associated with the registration of pesticides, including expedited review for certain end-use pesticides that are identical or substantially similar to currently registered pesticides ("me too" registrations) as provided in FIFRA section 3(c)(3)(B)(II), and for antimicrobial pesticides as provided for in FIFRA section 3(h)(2). EPA also has several programs to expedite the registration process for biological pesticides by the Biopesticides and Pollution Prevention Division, antimicrobial pesticides by the Antimicrobial Division and fast track procedures to expedite the registration of certain amendments to existing conventional pesticide registrations. As a result of these programs, EPA is already expediting many pesticide applications for registration.

FIFRA section 3(c)(10) establishes an expedited review for applications for registration and amendments to registrations for pesticides that "may reasonably be expected to accomplish one or more of the following:

(i) Reduce the risks of pesticides to human health.

(ii) Reduce the risks of pesticides to nontarget organisms.

(iii) Reduce the potential for contamination of groundwater, surface water or other valued environmental resources.

(iv) Broaden the adoption of integrated pest management strategies, or make such strategies more available or more effective."

The statute does not establish deadlines for review of registration applications or amendments that meet the above criteria. Section 3(c)(10), however, requires EPA to notify the applicant whether the application for expedited review is complete no later than 30 days after receipt of the application.

B. Procedures

EPA intends to establish a two-step procedure for expedited review pursuant to FIFRA section 3(c)(10).

1. Step One – Application. For step 1, the Agency will determine whether an application for registration or amended registration qualifies for expedited review based upon whether use of the pesticide proposed by the application may reasonably be expected to accomplish one or more of the criteria listed in Section VI.A. above.

To initiate the process, the applicant must submit an application for expedited review demonstrating how the use of the pesticide may reasonably be expected to accomplish one or more of the criteria listed in section VI.A. above. The applicant also must submit a reduced-risk rationale pursuant to the guidelines and procedures specified in sections VII - IX of this notice. The step 1 rationale may be a sentence or a paragraph in the reduced-risk rationale summary as long as the claims are documented elsewhere in the reduced-risk rationale.

Certain types of pesticide applications for registration and amended registration already receive expedited review pursuant to existing Agency programs. Because the Agency is already expediting review of these registrations, it is not necessary to include them in the review program established pursuant to FIFRA section

3(c)(10). Applications that already receive expedited review include applications for registration or amended registration for biological or antimicrobial pesticides, "me-too" applications for registration or amended registrations of end-use pesticides under FIFRA section 3(c)(3)(B)(I) that are identical or substantially similar to other EPA registered pesticide products, and applications for certain pesticides under FIFRA section 3(c)(3)(B)(II).

The FQPA amendments require EPA to make expedited decisions on antimicrobial pesticides as defined in FIFRA section 2(mm). Specifically, FIFRA section 3(h)(2) establishes goals for the time periods during which EPA must review different types of applications for antimicrobials covered by the statutory definition and make decisions whether to approve or deny the applications. Generally, these review and decision deadlines are 30% to 60% shorter than historic Agency performance in processing such applications.

While FIFRA antimicrobial review deadlines do not become legally binding until May 1998, as a matter of policy, the Agency has committed to and, in fact, is meeting the goals specified in FIFRA section 3(h)(2) as well as the expedited deadlines already mandated in FIFRA section 3(c)(3)(B). For every application received by the Agency since November 1, 1996, the Agency has made a registration decision within the review periods provided by the statute. EPA will continue to expedite review of applications for registrations and amendments to registrations for antimicrobial pesticides pursuant to its commitment.

The Agency's improved performance in review of antimicrobials is the result of several new initiatives. First, EPA has established within the Office of Pesticide Programs a new Antimicrobials Division (AD) that is responsible for all regulatory decisions relating to antimicrobial and related pesticides. In addition to regulatory staff, the new AD organization includes

scientific personnel capable of performing most of the analyses needed to make a registration decision. Thus, AD is capable of providing "one-stop shopping" for registration decisions. Second, the new AD management team has instituted a number of process improvements, including a dedicated expedited review team of "me-too" applications, that have resulted in a significantly improved performance.

Thus, because EPA's current organizational and resource allocations, and process improvements are providing expedited review for antimicrobials, all types of applications for antimicrobial pesticides (as defined in FQPA) will be outside the scope of this PR Notice.

What types of applications for expedited review will the Agency accept? An application for expedited review may be submitted only for the following types of actions:

(a) an application to register a conventional pesticide that contains an active ingredient not contained in any currently registered pesticide, provided the pesticide is not a biopesticide or an antimicrobial pesticide (as defined in FQPA). [See sections VII through IX for reduced-risk rationale guidelines]; or

(b) an application to amend the registration of a currently registered conventional pesticide for an additional new use, provided the pesticide is not a biopesticide or an antimicrobial pesticide (as defined in FQPA). [See sections VII through IX for reduced-risk rationale guidelines]; or

a non-fast-track application for registration of a new formulation provided the pesticide is not a biopesticide or an antimicrobial pesticide (as defined in FQPA). [See section X for expedited review rationale guidelines].

2. Step 2 – Reduced-Risk Determination. If an application for expedited review qualifies under step 1, the Agency will expedite the review of the reduced-risk rationale presented by the applicant to determine whether the pesticide qualifies under the reduced-risk criteria described in sections VII and X below. The Agency's Reduced-Risk Committee will expedite the review of the reduced-risk rationale and complete its review within thirty days of receipt of a complete reduced-risk rationale. If the Agency decides that a pesticide qualifies for reduced-risk status, then it will further expedite review of the remainder of the application for registration or amended registration as described in section IV of this notice.

If the Agency denies a submission reduced-risk status, applicants will be given only one opportunity to rebut this decision, and the applicant will have four weeks to resubmit their rebuttal. Due to limited program resources, the Agency can only allow one opportunity to rebut a decision. Pesticides that EPA determines do not qualify for reduced-risk status during step 2 will be processed in accordance with existing Agency procedures.

VII. GUIDELINES FOR REDUCED RISK RATIONALES

While participation in the reduced-risk pesticides program is voluntary, those who elect to participate must fully address all of the following areas: (a) executive summary, (b) human health effects; (c) environmental fate and effects; (d) other hazards; (e) risk discussion (f) pest resistance and management (e.g., IPM); and (g) comparative performance, (h) other information and how application complies with FQPA. The Agency will consider all of these areas in determining the acceptability of these applications. However, these may not be the exclusive factors in all cases. If an applicant identifies additional criteria that substantiate the argument that their product is indeed a reduced-risk pesticide, then EPA invites the applicant to submit a rationale with any

supporting data to verify such a claim. The Agency will consider this additional information.

An applicant's documentation must contain both a discussion of the inherent reduced-risk properties of their product, as well as a comparison of those properties with the properties of the commonly-used alternatives where appropriate. Comparisons must be made to conventional chemical pesticides, antimicrobial pesticides, biological pesticides, and cultural practices currently being used for pest control at the same use site(s) and for the same pest(s).

Please note that the Agency does not expect the applicant to perform any additional testing to derive the data necessary to develop rationales for the Reduced-Risk Program. The applicant must summarize all data in the applicant's possession or control or available through the open literature for the product being submitted to the Agency. If data addressing one of the stated factors has been developed, but is not required for registration of the pesticide in the United States, the applicant must provide a summary of these data as part of the Reduced-Risk Rationale. If any of the required information is not known, that fact must be noted in the rationale.

If the rationale does not include a discussion of each of these factors or provide reasoning as to why the factor should not be considered in the Agency's decision, OPP will consider the rationale to be incomplete and not responsive to this PR Notice. However, if the applicant believes that the factor does not apply to the new pesticide, the registrant must provide a short rationale describing this reasoning.

In situations where the Agency has already reviewed data on the active ingredient, the applicant should use the Agency's review to address the relevant factor(s). Applicants must also provide Master Record Identification (MRID) numbers for each study, where appropriate.

A. Executive Summary. Provide an executive summary that addresses the following considerations:

1. Chemical Name.
2. Chemical Abstracts Service Registry Number.
3. Chemical Structure.
4. Chemical Class or Family Name of the Active Ingredient.
5. Mode/Mechanism of Pesticidal Action for the Active Ingredient (if known).
6. Proposed Use Pattern (including site(s) of application and pest(s) controlled), Application Methods, Application Rates, Frequency of Application, and Product Formulation Percentages. Also indicate whether the new chemical will be used in combination with other registered pesticides.
7. Brief Overview Summary of the Health, Ecological and Environmental Fate Effects.
8. Tier 1 statement stating which of the four FQPA criteria are being met by this application.
9. Reduced-Risk Statement, articulating the specific factors that lead the applicant to the conclusion that the active ingredient offers the opportunity for risk reduction.
10. Data Matrix, providing tabular information on all data available for the active ingredient. The table should include the guideline reference number, the study title, MRID number (if available), outcome of the Agency's evaluation (i.e., in review, acceptable, supplemental, data waived, etc.),

and date of the Agency's review (if applicable).

B. Human Health. Clearly identify the portion of the rationale which addresses the potential effects of the active ingredient on human health. When specifying the dose levels used in the toxicity studies, present the no-observable-effects level (NOEL) and the lowest-observable-effects level (LOEL). Doses need to be specified in terms of mg/kg/day. Also, describe qualitatively and quantitatively the array of effects at all dose levels tested. In the format described in Part IX of this PR Notice, address each of the following aspects of the active ingredient and its use:

1. Acute Toxicity of the active ingredient and the formulations. Provide the toxicity category for each of the acute toxicity studies conducted on the active ingredient and the formulated products.
2. Reproductive, Developmental, Mutagenic and Neurotoxic Properties of the active ingredient.
3. Oncogenic and Other Subchronic and Chronic Effects of the active ingredient.
4. Toxicity of Mammalian and Plant Metabolites.

C. Environmental Fate and Effects. Clearly identify the portion of the rationale which addresses the potential ecological effects of the active ingredient and its environmental fate. The discussion should also address potential environmental degradates or metabolites of the active ingredient. Address each of the following aspects of the active ingredients and its use:

1. Mammalian Acute Toxicity
2. Avian Acute and Subacute Toxicity
3. Avian Reproductive Toxicity

4. Fish Acute and Chronic Toxicity
5. Aquatic Invertebrate Toxicity
6. Honeybee Acute Contact Toxicity
7. Effects on Terrestrial Plant Growth
8. Effects on Aquatic Plant Growth
9. Potential Exposure to Non-target Organisms
10. Environmental Persistence (Soil and Water)
11. Mobility in Soil and Water
12. Transport in Air (Spray Drift and Volatility)
13. Bioaccumulation as Indicated by the Octanol/Water Partition Coefficient

D. Other Hazards. Clearly identify the portion of the rationale which addresses other potential human health and environmental hazards produced by the following:

1. Potential to Deplete Stratospheric Ozone thus increasing ultraviolet radiation.
2. Potential to Present a Hazard through Storage, Transportation, Mixing, Use or Disposal based on its physical or chemical characteristics:
   a. stability
   b. flammability
   c. corrosion characteristics
   d. explodability
   e. oxidizing or reducing action
   f. storage stability
3. Potential to Affect Endangered and/or Threatened Plant and Animal Species as designated under the Endangered Species Act.

E. Risk Discussion. Clearly identify the portion of the rationale which addresses the following items:

1. Discuss the information which supports the claims that the active ingredient presents reduced toxicity, reduced exposure to humans or non-target organisms, and/or reduced environmental burden. When discussing the ecological levels of concern (LOCs), present the methods used to derive them and provide interpretations of what the LOCs mean.
2. Where alternative, registered pesticides or pest control practices exist, make a quantitative and/or qualitative comparison between the risks posed by the active ingredient under consideration and all the other pesticides commonly used, and/or the other current pest control practices.
3. The comparisons with alternative technology should also include biological pesticides as well as cultural and mechanical pest management practices.

F. Pest Resistance and Management. Clearly identify the portion of the rationale which addresses the following items:

1. Describe how the active ingredient addresses the development of pest resistance, either to the active ingredient itself or to existing pesticides registered for the same use.
2. Discuss the suitability of the active ingredient for use in, or encouraging the adoption of, Integrated Pest Management (IPM) programs. This discussion should include information on the effects of the

pesticide on natural predators, parasites and pathogens of each target pest, if such information is known. The degree of risk and/or usage reduction to be achieved by the IPM program must also be addressed.

G. Comparative Performance Data (efficacy data). These data are important to assure that risk reduction has a reasonable opportunity to be accomplished by adoption of the new pesticide by growers.

1. It is desirable to have summaries of comparative performance data in which the performance of the candidate pesticide is compared to that of alternative control measures under actual-use or simulated actual-use conditions.

2. Summaries of the available efficacy data if comparative performance data are not available.

Summaries should include statistical analysis of significant differences between the new pesticide and the commonly used alternatives. Summaries should also include experimental methodologies such as application rates, application intervals, pest pressure, weather conditions, varieties of the crop used, etc. Unfavorable results must be included. Efficacy experiments performed under substantially different conditions should not be combined (examples include differences in pest pressure, geography, strain/race of pest and weather). Guidance for this requirement can be obtained from standardized published tests such "Fungicide and Nematicide Tests," "Insecticide and Acaricide Tests" and methods section sections of juried professional journals.

H. Other Information. Submission of the following additional information will assist the Agency in making its decision on the active ingredient:

1. A copy of the proposed product label(s).

The Agency will consider all of these criteria using a weight-of-evidence approach.

VIII. GUIDELINES FOR FQPA RATIONALE FOR REDUCED RISK PESTICIDES

Reduced-risk submissions should also provide a rationale that explains how this registration action complies with the requirements of FQPA. Such rationale should follow guidance provided in Appendix A of PR Notice 97-1 (January 31, 1997). Such rationale should address at a minimum aggregate risk, special sensitivities, endocrine effects and potential common mechanisms of toxicity with other registered pesticides. Appendix A is provided as an attachment to this notice.

IX. FORMATTING AND SUBMITTAL PROCEDURES FOR REDUCED-RISK PESTICIDES

Formatting (A) and submittal (B) procedures for Reduced-Risk Rationales are provided below. These procedures will enable EPA to easily identify the application for priority consideration. Also, applicants should note that it is unlawful to falsify any portion of an application. FIFRA Sections 12(a) (2)(M), 12(a)(2)(R) and 18 U.S.C. Section 1001 make such actions unlawful and can result in civil or criminal penalties. The Agency will not consider an application under the Voluntary Reduced-Risk Pesticide Initiative if the applicant does not follow these procedures.

A. Format. The reduced-risk rationale document must include the following elements in the order indicated: Title Page, Statement or Supplemental Statement of Data Confidentiality Claims, Cover Sheet to Confidential Attachment and Confidential Business Information (CBI) Reduced-Risk Attachment. Any supporting data must comply with PR Notice 86-5 requirements.

The Reduced-Risk Rationale must be bound as a separate entity and consecutively paginated beginning with the title page as page 1. The total number of pages must be represented on the title page. Do not include CBI on the title page. On the title page, include titles and author(s).

B. Submitting a Reduced-Risk Rationale Registration Application. The Reduced-Risk Rationale should accompany the registration application and supporting data packages. This PR Notice does not supersede established submittal procedures as addressed in PR Notice 91-5; rather, this PR Notice provides additional guidance for submitting the reduced-risk rationale. OPP uses distribution codes to facilitate the delivery of registration and other submissions within the program. When preparing your submission to mail or deliver to OPP, direct your submission to the Document Processing Desk and including the following distribution code: REDUCED-RISK APPL.

The submission delivered via the U.S. Postal Service should be directed to OPP using the following address:

Document Processing Desk (REDUCED-RISK APPL.)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460-0001

Submissions via personal or courier delivery should be directed to the Document Processing Desk between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday, excluding federal holidays. OPP's Document Processing Desk is located at the following address:

Ofice of Pesticide Programs
Document Processing Desk (REDUCED-RISK APPL.)
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

C. Rebuttals may be submitted to Rick Keigwin, Registration Division (7505C), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460.

X. GUIDELINES FOR EXPEDITED REVIEW OF NON-FAST-TRACK NEW FORMULATIONS FOR CURRENTLY REGISTERED CONVENTIONAL PESTICIDES

Some new, non-fast-track, formulations and amendments to currently registered conventional pesticide products could result in reduced risk. To qualify, an application for expedited review under this section must first demonstrate that it meets one or more of the step 1 criteria listed in section VI.A of this notice. Secondly, the registrant must demonstrate that the new formulation, when compared with all of the existing formulation(s) for the active ingredient, results in significant risk reduction. Examples of risk reduction that would most likely qualify for expedited review include new formulations that result in (a) at least a 35% reduction in the amount of active ingredient applied, (b) at least a ten fold reduction in risks to mixers, loaders and applicators, (c) at least a 50% reduction in the product's potential to leach into groundwater or run off into surface water or (d) a significant reduction in risk to non-target species. Actions that are accepted will qualify for expedited review but will not be classified as reduced risk.

The process for submission of a non-fast-track formulation or new end-use product differs from the new active ingredient/new uses procedures. For consideration of a non-fast-track new formulation/end-use product, the registrant shall make a submission to the Product Manager with documented rationale for consideration of expedited review. The Product Manager will review the request and determine if the submission qualifies for expedited review. Consultation with other Product Managers or Branch Chiefs in Registration Division may

be necessary. The Product Manager will notify the applicant of the expedited review status within 30 days. If denied expedited review status, there will be one opportunity for rebuttal; the submitter has four weeks to resubmit their rebuttal to the PM. Finally, if the applicant holds the registrations for the old formulations that this new formulation will replace, a request for cancellation of the old formulations is also required. This cancellation request will not be processed until a registration is issued on the new formulation.

XI. BIOLOGICAL PESTICIDES

A. Background. In November, 1994, EPA established a pilot division, the Biopesticides and Pollution Prevention Division (BPPD), with part of its mission to expedite the registration and reregistration of biological pesticides (biopesticides). Biopesticides are any of the following: (1) naturally occurring or genetically altered microorganisms, (2) plant-pesticides (pesticidal substances produced in a plant and the genetic material necessary for the production of those substances), or (3) biochemical pesticides. In addition, BPPD does review the registration submissions for some other pesticidal substances which warrant a reduced data set as described below in Part C.

BPPD is now a permanent part of the Office of Pesticide Programs. To date, BPPD has been successful at expediting the registration of biological pesticides. Since the Division was established in the fall of 1994, 37 new biological pesticides have been registered including the first plant-pesticide products. New biopesticide active ingredients are typically registered in less than 11 months which is substantially less time than the average review time for conventional pesticides.

B. Priority for Review in BPPD. EPA believes that biological pesticides generally pose less risk than most conventional pesticides. Therefore, EPA established

BPPD to provide an expedited review to all biological pesticide products. BPPD's priority of actions is based upon the order submissions are received rather than a comparison of risk among the biopesticides. When a particular pesticide registrant requests that a certain one of its submissions receives top priority amongst that company's other biological actions, BPPD honors the requests. Also, if a biopesticide would replace the use of a hazardous pesticide requested for an emergency exemption under FIFRA Section 18, BPPD would make a case-by-case determination on whether to further expedite the regulatory decision.

C. Characteristics of Biopesticides

1. Microbial Pesticides. Microbial pesticides contain a bacterium, fungus, virus, protozoan or alga as the active ingredient. Approximately 50 microbial pesticide active ingredients are registered by EPA. The most widely known of these are varieties of the bacterium, Bacillus thuringensis or Bt, which can control certain moths, beetles, and mosquitoes. Data requirements for microbial pesticides are found in 40 CFR 158.740. BPPD encourages potential registrants to contact the Division for a preregistration submission meeting to discuss these data requirements, and the scientific rationales for study waivers.

2. Plant-Pesticides. In November of 1994, EPA published a proposed rule for regulation of plant-pesticides. In that document, EPA encouraged potential registrants to follow the proposed rule until the final rule is published. To date, seven plant-pesticide registrations have been issued. Once the final rule is published, EPA will propose guidelines for registration of plant-pesticides which will be incorporated into 40 CFR Part 158. The guidelines will be open to public comments and appropriate public meetings will be held prior to final guidelines being issued. In the meantime, potential

registrants should work closely with BPPD to determine the data requirements for their products.

3. Biochemical Pesticides. Biochemical pesticides are distinguished from conventional chemical pesticides by their nontoxic mode of action toward target organisms (usually species specific), e.g. growth regulation or mating disruption, and by the natural occurrence of the pesticidal substance. In contrast, conventional pesticides generally are toxic and may affect a wider range of target species. Biochemical pesticides generally fall into distinct biologically functional classes: Semiochemicals (chemicals emitted by a plant or animal that modify the behavior of receptor organisms of similar or different species), hormones, natural plant regulators, natural insect growth regulators, and enzymes. In many instances, biochemical pesticides may be synthesized rather than isolated from nature. In order for synthesized pesticides to be considered as biochemical pesticides, they must be demonstrated to be structurally similar and functionally identical to a naturally occurring biochemical pesticide.

Although there are no strict criteria for the definition of biochemical pesticides, most biochemical pesticides are applied at very low rates, are highly volatile, or are applied in bait, trap, or "encapsulated" formulations, thus resulting in less exposure (and less likelihood of adverse effects to humans and the environment than from use of most conventional pesticides). In keeping with their unique properties, biochemical pesticides have been assigned a set of data requirements which are organized in a tiered testing scheme to ensure, to the greatest extent possible, that only the minimum data sufficient to make scientifically sound regulatory decisions will be required. The data requirements are outlined in 40 CFR Part 158.690.

4. Pesticides Which Warrant Reduced Data Requirements. The Agency recognizes that many naturally occurring pesticidal chemicals may be highly

toxic to their target organisms and does not intend to include these as biochemical pesticides. BPPD has elected to review certain of these naturally occurring pesticides that may operate via a toxic mode of action toward target organisms, but which a priori also would be candidates for an initial tiered data set, as required for biochemical pesticides. These "biochemical-like" pesticides have not yet been formally classified into a subcategory of pesticides for nomenclature purposes. These pesticides usually have uncomplicated structures and are commonly present in the environment or the human diet at significant levels or have been widely used for non-pesticidal purposes. Thus, any clinical or nontarget effects are very likely to have been noticed and should be well documented. BPPD has found that potential registrants for these products generally follow the same data requirements as the biochemicals, but a preregistration meeting with the Division is highly recommended before extensive testing and before formal submission of an application.

D. Guidelines for Classification as a Biochemical or a "Biochemical-like" Pesticide to be Reviewed by BPPD. On request, the Biopesticides and Pollution Prevention Division (BPPD) will evaluate products on an individual basis to classify them as biochemical pesticides, pesticides warranting reduced data requirements ("biochemical-like"), or conventional chemical pesticides.

BPPD has formed a Biochemical Classification Committee to evaluate written requests for classifying products proposed for BPPD review as biochemicals and similar products. A classification request should include information to support the natural occurrence of the chemical and information bearing on its mode of action toward the target pest. Additional information to support low toxicity or low exposure levels may be useful if available. This could include GRAS (generally regarded as safe) status (please cite the listing number) or information on application rates and/or degradation rates. Published

studies or private data should be attached if the supporting information is not commonly known or obvious.

E. Evaluation Standards

1. Natural Occurrence. Naturally occurring substances may be inorganic or organic. As noted above, if the chemical is not naturally occurring, information must be provided showing that it is structurally similar and functionally identical to a naturally occurring substance. The Biochemical Classification Committee recognizes that "natural occurrence" may technically include substances that occur at very low levels in the environment, but in such amounts or locations that humans and/or nontarget organisms have not been exposed to significant levels of these chemicals. The committee may decide that these substances are not biochemical pesticides if there is any indication that natural exposure levels are insufficient to indicate potential effects from the expected product exposure.

2. Nontoxic Mode of Action. A nontoxic mode of action is one that does not kill the target pest. The most obvious are repellents and attractants. The committee has also included in the nontoxic mode of action category, those chemicals that may be lethal to the target, but operate via a physical mode of action to control the target pest. For example, certain oils and/or sticky substances can kill insects by clogging their respiratory spiracles and trachea, but such substances are not likely to have adverse effects on non-target organisms or humans. Desiccants also are considered as acting via a nontoxic mode of action. Plant growth regulators are usually considered to have a nontoxic mode of action; however, some plant growth regulators may act as herbicides at higher application rates. Thus, higher application rates may result in additional data requirements (as required for conventional chemical herbicides) or reclassification as a conventional chemical pesticide.

F. Formatting and Submittal of Request for Biochemical Classification. The classification request should be in the form of a letter and should be sent directly to the Biopesticides and Pollution Prevention Division (7511W), Office of Pesticide Programs, US Environmental Protection Agency, 401 M St SW, Washington, DC 20460. It should be labeled "Attn.: Biochemical Classification Committee."

G. EPA Response to Request for Biochemical Classification. Submissions for classification are reviewed by a team of scientists from several divisions within OPP. The recommendations of the Committee are brought to management for approval. Decisions can include classification as a biochemical, classification as a "biochemical-like" substance that warrants reduced data requirements, but is not a biochemical, or classification as a conventional pesticide. The potential registrant is informed by letter of the decision. Because these are preapplication requests for classification, the information submitted and the results may, upon request, be treated as confidential business information.

H. Rebuttals to Denials for Biochemical Classification. In some cases, inadequate information is supplied so that a Committee recommendation cannot be made. In these cases the potential registrant is asked to submit additional information. If a potential registrant disagrees with classification as a conventional pesticide (essentially a denial of classification as a biochemical), a rebuttal can be submitted to the Biochemical Classification Committee for reconsideration.

XII. FOR FURTHER INFORMATION

For further information on reduced-risk submissions for conventional pesticides, contact Peter Caulkins, Associate Director, Registration Division at (703) 305-6550. For further information on antimicrobial pesticides, contact Bill Jordan, Associate Director, Antimicrobials Division at (703) 308-6411. For further information on microbial and plant-pesticides, contact Phil Hutton, Chief, Microbial Pesticides Branch, BPPD at (703) 308-8260 and for biochemicals, contact Roy Sjoblad, Chief, Biochemical Pesticides Branch, BPPD at (703) 308-8269.

Daniel M. Barolo, Director
Office of Pesticide Programs

APPENDIX A

CONTENT OF SUPPLEMENTAL INFORMATION

As indicated at the beginning of the PR Notice, registrants, applicants and petitioners are not currently required to submit any additional information. Nevertheless, since the new statute requires the Agency to consider additional information in order to make the necessary decisions, EPA recognizes that many registrants, applicants and petitioners may wish to provide the supplemental information to the Agency even without a requirement to do so. For those registrants, applicants or petitioners who wish to supplement their original submissions with additional information, this Appendix describes what information the Agency would consider helpful additions for its review.(*1)

(*1) An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it either displays a currently valid OMB control number or is imposed on the person by statute (5 CFR 1320.6(a) & (e)). The collection of information relating to the registration, reregistration, and tolerance programs have are approved under OMB Control Numbers 2070-0024 (expires: 6/30/99); 2070-0032 (expires: 5/3/98); 2070-0040 (expires: 11/30/99); 2070-0060 (expires: 5/31/98); 2070-0122 (expires: 11/30/97); 2070-0107 (expires: 7/31/99). If you should have any comments on the collection activities, please send them to the Director, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (Mailcode 2137), 401 M St., S.W., Washington, D.C. 20460. Include the OMB control number in any correspondence. Note that this address is ONLY for comments on the collection activity. Do not submit your information to this address.

All tolerances or tolerance exemptions and associated registration actions under FIFRA section 3 or reregistration actions under FIFRA section 4, whether pending or future, will need to comply with the new safety standard of section 408(b)(2) of the Federal Food, Drug and Cosmetic Act. In addition, because EPA intends to apply a similar standard to actions involving non-food use pesticides that may pose significant non-dietary risks to infants and children, all registration and reregistration actions also will need to comply with this standard with respect to the Agency's consideration of infants and children exposure to the pesticide.

In preparing a package to be submitted, those seeking a registration, reregistration, tolerance, or an exemption from the requirement of a tolerance for a food use pesticide, or a registration or reregistration of a non-food use pesticide that may result in significant exposure to children, may need to provide additional information and/or materials to address adequately the factors and specific questions contained here. Those who wish to submit additional information should keep in mind that the Agency will consider each factor listed below (and perhaps others as Agency policies are developed) in addition to any data and information already required. In addition, it is important to note that the information identified here may not be definitive in all cases. Additional information or more detailed information may be needed in individual cases. If a registrant, applicant, or petitioner can identify additional information that would assist the Agency in addressing the FQPA provisions, EPA welcomes such information. Although the submission of this information is not currently required by the regulations, if such information is not submitted, the Agency must rely on previously submitted data, if applicable, or on broad or default assumptions when considering the factors listed. As a result, favorable action on an application, petition, or reregistration decision may be significantly delayed or precluded altogether.

It would be helpful for any submitted documentation to contain a discussion of each of the following factors as it relates to the pesticide and proposed tolerance or tolerance exemption. If information on any factor is not known, that fact, along with an explanation, should be noted in the rationale. It is important to note that EPA does not expect the registrant, applicant, or petitioner at this time to perform any additional testing to derive the data necessary to develop its rationales. However, if it has in its possession data from preliminary reports of ongoing studies, articles from published literature, unpublished report information, previously unsubmitted studies, or supplemental data that are otherwise pertinent to the Agency's concerns, the party is encouraged to submit them. Likewise, if a registrant, applicant, or petitioner believes that a factor is not applicable to its product, a discussion as to why this view is held should also be included. The Agency will consider all relevant factors in determining an application's completeness and in setting priorities for review.

Based on the new safety standard, EPA will need the following additional information in order to make appropriate regulatory decisions: (For details on each factor, please refer to the explanations below in parts A and B.)

1. An informative summary of the petition or application, including a summary of the supporting data, information, accompanying rationales, and a statement providing permission to publish such summary, and
2. Information and discussion pertaining to a specific safety determination for infants and children including their special susceptibilities and exposure patterns to the particular pesticide.

A. Food Use Pesticides: Registration and Reregistration Actions, Experimental Use Permits, Tolerance (or Exemption) Petitions and Reassessments

In the format described in Appendix C of this PR Notice, address each of the following with respect to the pesticide and its use(s):

Special Sensitivities

a) Chronic Endpoints

For a chemical pesticide: Discuss and/or provide evidence as to whether or not the current Reference Dose (RfD) is sufficient to adequately protect infants and children. Discuss and/or provide evidence as to whether or not infants and children are more susceptible to the chemical. If you believe that an additional safety factor of 10X, to take into account potential pre- and post-natal toxicity to infants and children is not necessary, provide evidence to support the additional safety factor, if any, you believe to be more appropriate. Please bear in mind that the Agency may accept a different margin of safety only if, based on reliable data, EPA concludes that the margin will be safe for infants and children.

For a biochemical pesticide:(*2)

(*2) A biochemical is a naturally-occurring compound, or substantially similar to a naturally-occurring compound, with a non-toxic mode of action to the target pest.

Does the toxicity testing indicate that the establishment of an RfD is warranted? If so, then discuss whether or not the RfD is sufficient to adequately protect infants and children. Discuss and/or provide evidence as to whether or not infants

and children are more susceptible to the biochemical pesticide.

For a microbial pesticide:(*3)

(*3) Certain subpopulations are more susceptible to certain disease-causing microorganisms; however, these are not the types of microorganisms that are considered for registration or use as microbial pesticides. The Agency has not registered, and does not expect to register a microbial active ingredient that is known to be a common human pathogen. To address the potential risk from microbial pesticides, the Agency requires a battery of acute toxicity/pathogenicity studies in order to perform a risk assessment. If results of the acute exposure studies indicate a toxicity concern, then subchronic or chronic studies are required.

Discuss the potential for chronic dietary risks for infants and children. Discuss and/or provide evidence as to whether or not infants and children are more susceptible to the microbial pesticide than is the adult population.

b) Acute Endpoints

Discuss the potential for greater acute dietary risk for infants and children. If the chemical or biochemical pesticide demonstrates acute effects, then discuss the endpoint used to perform the assessment including relevance to infants and children and the details as to how the exposure assessment was conducted and whether the estimated risk is within the Agency's levels of concern.

c) Carcinogenic Endpoints

If the chemical or biochemical has been determined to be a carcinogen and has a cancer potency factor (Q1*), discuss the aggregate excess lifetime cancer risk resulting from exposure to the chemical from residues

in food and drinking water (ground and surface water) and from residential and other non-occupational source(s).

Aggregate Exposure

a) Water

For a chemical or biochemical pesticide: Discuss the potential for the transfer of residues (of both the parent pesticide and any degradates) to drinking water. The discussion should include, but not be limited to, information indicating whether the pesticide is persistent and/or mobile, relevant product chemistry, and any available modeling data.

Has the chemical or any of its degradates been detected in ground water or surface water? Would this chemical or any of its degradates likely pass through primary or secondary drinking water treatment into finished water? Are any States conducting water monitoring programs for this pesticide? If so, data collected by the States and all relevant information should also be included.

For a microbial pesticide: Discuss the potential for the transfer of the microbial pesticide to drinking water. The discussion should include, but not be limited to, information pertaining to the biology of the microorganism, and indicating whether the pesticide is persistent and/or mobile or has the potential for transport in air (spray drift and volatility data). Are any States conducting water monitoring programs for this strain? If so, data collected by the States and all other relevant information should also be included.

b) Non-occupational Exposures

Discuss the potential for significant exposure to the pesticide of children by routes other than dietary. Are there any non-occupational, structural, or residential uses (e.g., pet, swimming pool, lawn and

garden, or topical insect repellent)? Is the pesticide used in or around schools, parks, or recreation facilities? Provide all available exposure data. If the pesticide demonstrates acute effects, then discuss the endpoint used to perform the assessment, including relevance to infants and children and the details of how the residential exposure assessment was conducted and whether the estimated risk is within the Agency's levels of concern.

c) Multiple Pathway Assessment

Discuss the chronic and/or acute risk of aggregate exposure via multiple pathways for the general population, and for infants and children. This should include a discussion of all assumptions used and uncertainties. You should also identify, and include in the discussion, any non-pesticidal uses of the chemical (e.g., industrial, pharmaceutical, cosmetic, food additive).

Cumulative Effects

Discuss the mechanism and mode of action of this pesticide. Identify other chemicals that may fall into this category (both pesticide and non-pesticide chemicals). Provide information regarding common mechanisms and modes of action with other chemical substances based on structural similarity, same or similar endpoints, and other relevant criteria. Provide any data and/or evidence illustrating similarities at the cellular/molecular level.

Discuss the appropriateness of combining exposures in this particular case. Where data are not available, discuss appropriateness of using default assumptions and what defaults should be used.

Endocrine Effects(*4)

(*4) As indicated in section 408(p)(1) & (2), the Agency has 2 years to develop a screening method, with a total of 3 years to implement such a program.

Discuss and provide any evidence relevant to the possibility that the pesticide may have endocrine disrupter effects individually or in combination with another chemical. Include the potential for synergistic effects of your chemical in combination with other chemicals.

Identify any instances of reported (proven or alleged) adverse reproductive or developmental effects to domestic animals or wildlife as a result of exposure to your chemical, or that occurred in an area where the chemical is known to have been used. Provide all information regarding the circumstances, estimated level of exposure, and details of the effect.

Residue Chemistry

Information should include a discussion of compatibility with established Codex Alimentarius Commission Maximum Residue Levels (MRLs), submission of a practical analytical method with an appropriate limit of detection, and a discussion of the potential need for tolerances for processed foods. For tolerance exemption petitions, indicate if the chemical is on the Food and Drug Administration's Generally Recognized As Safe (GRAS) list. A summary of all tolerances and exemptions from tolerance being proposed should also be included.

Benefits Information (For Reregistration Actions Only)

If the information and data submitted indicate that an existing tolerance, reviewed according to the requirements of the new legislation, should be determined to be unsafe (that is, to exceed the "reasonable certainty of

no harm" standard), the new law allows EPA to consider pesticide benefits information in certain instances. An "eligible pesticide chemical residue" (for which an "eligible tolerance" may be applicable) is defined as a chemical residue for which

1) EPA is unable to identify a level of exposure that will not cause or contribute to a known or anticipated harm to human health (that is, the effect is a non-threshold effect);

2) an appropriate quantitative risk assessment for the lifetime risk of the non-threshold effect has been determined; and

3) if there are also threshold effects associated with the chemical, EPA is able to identify a level at which the residue will not cause any known or anticipated harm to human health and that the level of aggregate exposure is safe.

Registrants who suspect that an existing tolerance for their chemical, which has been classified by the Agency as exhibiting a non-threshold effect, may exceed the new safety standard, and wish the Agency to consider an eligible tolerance for residues of that pesticide, may need to submit the following information:

Conditions Regarding the Use of the Pesticide

Information and/or data indicating that the use of the pesticide chemical that produces the residue protects consumers from adverse health effects that would pose a greater risk than the dietary risk from the residue, OR

Information and/or data showing that the use of the pesticide chemical that produces the residue is necessary to avoid a significant disruption in the domestic production of an adequate, wholesome, and economic food supply.

Conditions Regarding the Risk of a Pesticide

Evidence that the yearly risk associated with the nonthreshold effect from aggregate exposure to the residue is not greater than ten times the yearly risk allowed under the new safety standard, AND

Evidence that the tolerance is limited to ensure that the lifetime risk associated with the nonthreshold effect from aggregate exposure to the residue is not greater than twice the lifetime risk allowed under the new safety standard.

It is important to note that the above information does not supersede any existing benefits requirements under FIFRA, such as public health pests and benefits data necessary for a public interest finding under FIFRA section (3)(c)(7).

B. Non-Food Use Pesticides: Registration or Reregistration Actions

In the format described in Appendix C of this PR Notice, address each of the following with respect to the pesticide and its use(s):

Potential for Exposure to Children

Describe the use pattern of your chemical. If you believe that its use(s) would not potentially result in significant exposure to infants and children, provide a discussion and rationale as to why this view is held. For chemicals that appear not to result in a significant exposure to infants and children, no additional information is needed.

If you believe that the use of your chemical may result in significant children's exposure, the following factors may need to be addressed:

Special Sensitivities

Discuss and/or provide evidence as to whether or not infants and children are more susceptible to the chemical than adults.

Discuss the potential for greater acute and/or chronic risk for infants and children. If the pesticide demonstrates toxic effects, then discuss the endpoint used to perform the assessment including relevance to infants and children and the details as to how the exposure assessment was conducted and whether the estimated risk is within the Agency's levels of concern.

Aggregate Exposure

Discuss the potential for the transfer of residues of both the parent chemical and any degradates or of the microbial pesticide to drinking water. For chemical pesticides, the discussion should include, but not be limited to, information indicating whether the pesticide is persistent and/or mobile, the potential for transport in air (spray drift and volatility data), and any available modeling data. For microbial pesticides, the discussion should instead include information pertaining to the biology of the microorganism and indicate whether the pesticide is persistent and/or mobile.

Has the chemical or any of its degradates been detected in ground water or surface water? Would this chemical or any of its degradates likely pass through primary or secondary drinking water treatment into finished water? Are any States conducting water monitoring programs for this pesticide? If so, data collected by the States and all relevant information should also be included.

Discuss the potential for significant exposure to the chemical of children by non-dietary routes. Are there

non-occupational, structural, or residential uses (e.g., pet, swimming pool, lawn and garden, or topical insect repellents)? Is the pesticide used in or around schools, parks, or recreation facilities? Provide all available exposure data.

Discuss the chronic and/or acute risk of aggregate exposure via multiple pathways for the general population, infants and children should include a discussion of all assumptions used and uncertainties.

Identify other non-pesticidal uses of the chemical (e.g., industrial, pharmaceutical, cosmetic, food additive).

Cumulative Effects

Discuss the mechanism and mode of action of this pesticide. Identify other chemicals that may fall into this category (both pesticide and non-pesticide chemicals). Provide information regarding common mechanisms and modes of action with other chemical substances based on structural similarity, same or similar endpoints, and other relevant criteria. Provide any data and/or evidence illustrating similarities at the cellular/molecular level.

Discuss the appropriateness of combining exposures in this particular case. Where data are not available, discuss appropriateness of using default assumptions and what defaults should be used.

Endocrine Effects

Discuss and provide any evidence relevant to the possibility that the chemical may have endocrine disrupter effects individually or in combination with another chemical. Include the potential for synergistic effects of your chemical in combination with other chemicals and whether or not your chemical could act as a catalyst for another hormone-disrupting chemical.

Identify any instances of reported (proven or otherwise) adverse reproductive or developmental effects to domestic animals or wildlife as a result of exposure to your chemical, or that occurred in an area where the chemical is known to has been used. Provide all information regarding the circumstances, estimated level of exposure, and details of the effect.